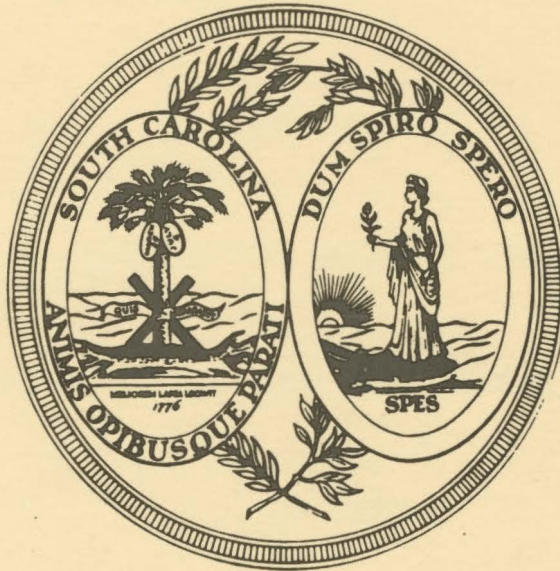


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South Carolina General Assembly



Legislative Audit Council



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South Carolina General Assembly
Legislative Audit Council
A Performance and Management
Review of the South Carolina
Educational Television Network
April 30, 1981

THE STATE OF SOUTH CAROLINA

GENERAL ASSEMBLY

LEGISLATIVE AUDIT COUNCIL

A PERFORMANCE AND MANAGEMENT REVIEW

OF THE

SOUTH CAROLINA

EDUCATIONAL TELEVISION NETWORK

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REPORT SUMMARY

Introduction

The Legislative Audit Council was requested by the General Assembly of South Carolina to conduct a complete audit of the South Carolina Educational Television Commission. The request asked the Council to determine total audience figures, total student impact, and other benefits of the Educational Television Network, and to review management practices.

In conducting the audit, the Council staff examined areas of concern related to compliance with laws and regulations, efficiency of operations and general management. Pertinent State and Federal laws, rules and regulations, and ETV's policies and procedures were reviewed. Interviews were conducted with the staffs of the Educational Television Commission and the Office of Instructional Television of the State Department of Education to gather useful information. The Council appreciates their cooperation and assistance in developing this report.

Additionally, the Council conducted two surveys while the audit was in progress. A survey of teachers was conducted to determine the utilization of instructional television and radio in public schools. Ten Southeastern states were surveyed to obtain information on educational and public television production, instructional television for public schools and funding for public and instructional television.

Operations at ETV consist of two basic program areas. One is the providing of instructional television programming to the State's schools while the other is the broadcasting of the evening educational programs which are largely funded by grants from the Corporation for Public Broadcasting and the ETV Endowment. The Council found most problems to be in the area of providing instructional programming.

The Council is concerned about several areas due to ETV's relationship with the South Carolina ETV Endowment. The Council believes that similar situations could also exist in other agencies that are served by endowments or foundations. A statewide review will be conducted of these relationships in order to address needed improvements in their broader applications.

During the course of this audit, the Legislative Audit Council found that ETV needs to be more accountable to the General Assembly and responsive to laws, regulations and sound management principles. Management should exert more initiative to obtain needed information for sound and timely decisions. In addition, ETV needs to be more attentive to the development of complete and appropriate internal operating procedures.

Following this summary, the body of the report is divided into four chapters. Chapter I contains an introduction, background and history of the Educational Television Commission. Chapter II addresses operations of the instructional and public television systems. Chapter III concerns ETV procedures, while Chapter IV addresses ETV's relationship with other agencies and educational television operations in other states. The findings detailed in Chapter II and III are summarized in the following pages.

SUMMARY OF CHAPTER II

EDUCATIONAL TELEVISION OPERATIONS

Utilization of Television Equipment in Public Schools (p. 28)

The Office of Instructional Television (ITV) and Radio in the State Department of Education, and the Educational Television Commission

(ETV) have not ensured the effective utilization of educational television equipment in South Carolina. The Council found three specific problems in this area.

- (1) Neither ITV nor ETV have ensured that unused television sets purchased with State funds are removed from schools and redistributed to schools needing the sets. A review of ITV records showed there were 2,415 operable television sets that were not used for school year 1978-79. The Council identified 1,466 operable television sets with a replacement cost of \$258,016 which were not used by schools for two consecutive school years, 1977-78 and 1978-79. During the same two-year period, ETV requested and received from the General Assembly \$87,500 to purchase additional television sets. If sets were properly redistributed to schools that expressed a desire to use ITV, the purchase of new sets could have been reduced.
- (2) ETV has not accounted for television sets and related equipment valued at \$750,000 which was purchased with State funds for public schools. Neither ETV nor ITV have maintained an inventory and State-purchased equipment cannot be identified from locally purchased equipment. Lack of inventory control can allow the misuse of government property, unnecessary duplicative purchasing of equipment, and distorted budget projections for future equipment needs. Furthermore, television sets cannot be redistributed because equipment purchased with State funds cannot be clearly identified, and therefore, equipment remains unused in many public schools.

- (3) The Office of Instructional Television and Radio in the State Department of Education has inadequate procedures for allocating new TV and radio reception equipment purchased with State funds to public schools. The procedures for determining which schools should receive State aid for television and radio equipment is not based on need. Not distributing equipment based on actual need has resulted in schools and districts with low television utilization receiving additional TV sets.

Public School Usage of Instructional Television and Radio (p. 39)

The Audit Council conducted a survey of teachers in areas that have high potential for instructional television (ITV) viewing to determine the usage of instructional television and radio. The Council found that usage of both ITV and radio appears to be low.

- (1) The Council found that in areas having the highest viewing potential in the State, only 38% of the teachers had used any ITV in the past week of the survey and another 10% had used it in the past month. A total of 37% did not use any ITV during the school year. Of the 63% of teachers that used ITV, 83% used it less than 2 hours a week for all of their classes. The cost to the State was approximately \$13 million in FY 78-79 to provide ETV services for this amount of use.
- (2) The Council's survey included schools capable of receiving instructional radio programming and found very low usage of instructional radio. The survey revealed that 91.1% of teachers surveyed had not used any instructional radio during the entire school year and

81.5% had never used it. The State expended approximately \$50,000 in FY 78-79 to provide instructional radio services.

Neither ETV nor ITV have established a method to measure the impact of Instructional Television or Radio on education in South Carolina. They cannot tell if students in South Carolina have benefited anymore from instructional television than from other instructional methods. No criteria exists to determine how much ITV or radio should be used or whether ITV improves student performance anymore than the use of filmstrips, instruction by the classroom teacher, or other less expensive alternatives. Expenditures to promote and develop ITV and radio are growing annually, but the educational benefits gained by school children in South Carolina from using ITV and radio are not being determined.

Information Concerning the Utilization of Instructional Television and Radio (p. 44)

The Council found that the information provided to the Legislature on the public school use of instructional television and radio, is inadequate, misleading, inaccurate, and therefore, is an insufficient basis for sound decision-making.

- (1) The information collected by the Office of ITV and Radio does not provide an adequate indication of the extent which students and teachers use ITV and radio. The Office of ITV and Radio knows the number of students and teachers who have viewed ITV at least once during the year, but the amount of time ITV and radio is used is not known. Consequently, it is impossible for ITV to

determine how often any public school uses ITV or the difference between schools of low and high utilization.

- (2) ETV reports information on student usage of ITV in terms of "course enrollment" but there are no students actually enrolled in ITV and there are no ITV courses. The word "enrollment" is misleading because students using ITV programs are not required to take exams or attend television classes regularly. The word "course" is misleading because it implies that program series are the primary source of instruction when ITV and radio are used in the same manner as a filmstrip or audio-visual aid.
- (3) The Council reviewed past utilization statistics collected by ITV and found instances of overstated student participation in ITV from 1972 to 1979. For example, in school year 1978-79, 74 schools reported having 1,743 more individual students "enrolled in ITV" than students enrolled in the schools.

Without accurate information on instructional television and radio usage in public schools, ITV and ETV managers are hampered in their decision-making. They can neither ensure the efficient allocation of television equipment to schools that need it most nor can they ensure the efficient expenditure of more than \$3.3 million annually for the closed circuit network. The General Assembly is also hampered in decision-making when presented with insufficient and misleading reports of ITV usage as justification for budget increases.

Regional Studios (p. 51)

The need for regional production studios in South Carolina is questionable. South Carolina is decentralizing ETV production and moving toward providing local production capability. Yet, communities can be served with repeater transmitters more economically than by operating costly regional studios and transmitting towers. ETV could have provided adequate reception to areas served with regional studios through the use of transmitters alone at an annual cost of \$607,873 versus the \$1,463,712 cost of operating the three studios in FY 78-79. Furthermore, \$3,807,799 in bond funds have been authorized to construct towers and buildings to provide for three additional regional studios and as of July 31, 1980, \$2,291,192 had been expended.

Viewer Information (p. 58)

ETV does not have adequate viewer information on viewing audiences for five of eight ETV stations. In these five viewing areas ETV does not know how many households view ETV programs. Based on the Nielsen ratings, the average reported viewing audiences for three ETV stations ranged from 2.75% to less than 1% for six months in 1979 and 1980. Effective decision-making requires that management possess sufficient and accurate information. ETV is expending resources based on incomplete information about its viewing audience. Consequently, ETV cannot adequately assess the impact of its programming actions on the citizens of the State and therefore, does not know if it is operating in a cost-effective manner.

Tape and Delay Centers (p. 62)

Tape and delay centers have had little effect on increasing the usage of ITV resources in secondary schools. Utilization of ITV by schools served with tape and delay centers in school year 1978-79 was only 4.9% higher than schools without the centers. Statewide, only 5,327 more students viewing ITV at least once could be attributed to the addition of the centers. The cost to operate 12 tape and delay centers is \$272,595 annually to increase utilization by only 5,327 students in 118 schools. Thus, the average cost of each additional student served by tape and delay centers is \$51.17 and the amount of time the students view ITV is not known.

Mobile Units (p. 64)

ETV's need for three mobile units, valued at \$148,000, with remote production capability is questionable. The three mobile units were used only 9% of the total days available for production activities during FY 78-79, and of 25 productions made during that year, 23 were produced with the same mobile unit. By maintaining three vehicles when the majority of production activities are performed by one vehicle, the State is not receiving optimum benefit from the vehicles in terms of the percentage of time production activities are conducted. In addition, ETV is losing potential revenue in resale or trade value by holding unnecessary equipment.

ETV Guide (p. 68)

In 1979-80 approximately 452,000 copies of the ETV Guide were provided free of charge to in-state and out-of-state subscribers and

ETV Endowment members. The cost to print and mail the ETV Guide was \$192,050 in FY 79-80, and \$131,080 of this was attributed to individual subscribers who pay nothing but are subsidized by the State's taxpayers. If these subscribers were required to pay an annual subscription fee for the ETV Guide, an annual savings of at least \$131,080 in State-appropriated funds could be realized.

Closed Circuit System (p. 73)

The Council's review of ETV's closed circuit system revealed three areas of concern. First, it was found that ETV does not have a written policy with the public schools for terminating closed circuit services to schools reporting minimal usage. The State paid \$45,235 in 1978-79 for closed circuit services to 11 schools that reported no usage of instructional television for the year and paid \$98,429 to schools reporting student "enrollment" of 1-25% in ITV courses. From FY 74-75 to FY 79-80, the State could have saved \$73,310 if appropriate action had been taken by ETV to terminate one school that reported no usage or interest in instructional television. Second, ETV does not have a written contract with the public utility from which it is leasing the telephone land lines. Finally, ETV should study video cassette duplication as an alternative to providing closed circuit service to those schools presently not receiving the service. Due to increasing closed circuit rates, ETV provided video cassette duplication services for instructional television in lieu of closed circuit services to 16 schools and as a result saved \$150,618 for FY 79-80.

The cost to the State for leasing the telephone lines for closed circuit is \$3.3 million annually. The lack of termination policies defining

minimal utilization, of a written contract with the public utility, and limited use of tape duplication restricts ETV's ability to ensure that State funds are expended in the most efficient manner.

SUMMARY OF CHAPTER III

ETV PROCEDURES

Need for ETV Procedures (p. 81)

The ETV Commission has not fulfilled its managerial role through the development of complete and appropriate internal operating procedures. ETV does not have a Policies and Procedures Manual addressing overall operations, administration and management procedures of the agency. ETV's management, supervisors and employees are without a manual to guide them in the performance of their duties.

Expenditure of State Appropriations (p. 82)

In FY 77-78 ETV spent \$198,710 on the operation and expansion of the closed circuit network when the funds were appropriated for an anticipated rate increase which was not approved. The funds were spent after the Budget and Control Board recommended that the funds held for the rate increase lapse to the General Fund when it appeared that the rate increase would not materialize during that fiscal year. The expenditure of funds on the closed circuit system necessitated the continuance of the \$198,710 increase for the following years to pay for additional closed circuit costs. This expenditure without legislative approval resulted in a cost to the State of \$794,840 from FY 77-78 to FY 80-81.

Inventory Management (p. 84)

The Council reviewed ETV's property management system to determine the adequacy of control over inventory valued at \$18.8 million and found that several problems existed.

- (1) ETV has provided inadequate justification for requesting State funds for equipment in its budget requests to the Budget and Control Board. From FY 76-77 to FY 78-79 ETV requested \$2,309,006 for equipment without detailed schedules of the equipment to be purchased accompanying the budget requests and was appropriated \$1,684,432. Because ETV had not provided adequate justification for its requests to the Budget and Control Board, the Council could not determine what equipment items ETV planned to purchase with its appropriation. A budget process in which a State agency does not justify its request for funds does not assure that scarce resources are allocated in order to derive maximum benefit to the public.
- (2) ETV has on inventory 131 items of equipment with an original value of over \$77,000, which have been identified as unused for over one year but have not been disposed of. ETV's retention of unused equipment is inefficient because equipment which is retained and not used loses sale or trade-in value the longer it is kept.
- (3) ETV did not provide adequate inventory controls for video tapes valued at more than \$70,000 used for instructional programming in FY 79-80. Tapes valued at more than \$55,000 were the type used

in home video tape recorders which made them susceptible for misuse or theft. Because of the absence of adequate controls over video tapes, the management of ETV did not know how many tapes they should have on hand and could not be assured that video tapes were properly safeguarded.

- (4) ETV does not account for durable items of equipment purchased for use as stage props. By not maintaining some form of accountability for items of equipment purchased for use as stage props, these items could be lost, stolen or misused without the knowledge of the agency.

Personnel Procedures (p. 91)

The Audit Council reviewed ETV's personnel management practices and found that several problems existed with hiring practices, related employees and employee evaluations.

- (1) ETV's hiring practices were found to be questionable in that standard hiring practices were not followed in filling three top-level positions. These management positions were filled by individuals who either lacked the education or experience required or were filled without advertisement of the positions. The agency's ability to obtain qualified managers is limited when well-designed hiring and recruiting policies are not followed. Also, the failure to assure fair employment opportunities to all eligible individuals could place ETV in danger of losing its FCC license.

- (2) The Council identified 44 full-time related employees at ETV. This represented 12% of the work force of 357 employees. Seven department or division heads had relatives in lower-level positions in other departments in the agency. The number of relatives working for ETV creates the potential for a conflict of interest.
- (3) The Council found that top management did not complete employee performance appraisals by leaving the appraisals blank, except for the overall rating. No justification was given for ratings of "outstanding" for four division heads and five division heads had not been evaluated in the past year. Incomplete performance appraisals result in the inequitable treatment of employees. By not having completed performance appraisals, division heads do not have a documented history of their performance and are not informed of strong and weak points as well as expected improvements.

Travel (p. 95)

Two employees traveled outside the United States without the approval of the Budget and Control Board. The Board reviews requests for travel outside the United States to provide an objective evaluation of the benefits to be derived in terms of costs, whether in the form of travel expenses or an employee's time. The lack of approval by a party independent of the agency, such as the Budget and Control Board, violates travel regulations and can result in unnecessary travel abroad by State personnel.

Procedures for Hiring Private Attorneys (p. 96)

ETV is paying for the services of private attorneys without knowing the terms of their service. In FY 79-80 ETV paid two private attorneys a total of \$6,841.91 for their services based on lump sum bills which did not contain an itemized breakdown of the time the attorneys spent performing tasks for ETV. One of the two attorneys was paid \$1,911.55 based on one billing for attending an unspecified number of conferences and meetings. Without procedures to define the term of service, billing, and the services allowed for billing, ETV cannot control the payment for services and could be paying excessive prices or unnecessary costs for attorneys' services.

Indirect Costs (p. 99)

ETV has not reported indirect cost recoveries for credit to the General Fund in its budget request to the Budget and Control Board. ETV projected no indirect cost recoveries for FY 78-79 and FY 79-80, but recovered \$11,676 in FY 78-79 and \$46,803 in FY 79-80. The effect of ETV's not budgeting indirect cost recoveries is that the State cannot accurately project revenues for the forthcoming fiscal year and projected revenues are underestimated. Furthermore, the Legislature is not given the opportunity to appropriate these funds for needed programs.

Conclusion

Based on the findings in this report, indications are that State resources for educational television are not utilized as effectively as possible. There are areas where improvements can be made and have

been made during the course of the audit. However, the continuing of certain functions now being performed is questionable. The General Assembly may want to consider the amount of State funds committed to some programs in light of their usage and the benefits derived and decide whether they should be continued or changes made.

The major recommendations of the report are summarized in the following pages.

RECOMMENDATIONS

- (1) ETV SHOULD DEVELOP A COMPLETE INVENTORY DESCRIPTION OF EQUIPMENT PURCHASED WITH STATE FUNDS IN PUBLIC SCHOOLS. THE INVENTORY SHOULD CONTAIN INFORMATION SUCH AS MANUFACTURER'S NAME, TRADE NAME, SIZE, COLOR, AND MODEL NUMBER.

ANY EQUIPMENT, IDENTIFIED AS PROPERTY OF SOUTH CAROLINA ETV, THAT IS IN SCHOOLS AND NOT BEING USED SHOULD BE REMOVED AND PLACED IN SCHOOLS NEEDING THE EQUIPMENT.

STATE MATCHING FUNDS SHOULD BE PROVIDED TO SCHOOLS BASED ON A NEEDS ASSESSMENT OF THE ENTIRE STATE RATHER THAN LIMITING THE NEEDS ANALYSIS TO EACH DESIGNATED UTILIZATION DISTRICT.

- (2) ETV, IN COOPERATION WITH THE OFFICE OF ITV, SHOULD CONTRACT WITH AN INDEPENDENT PARTY TO CONDUCT AN IN-DEPTH STUDY OF INSTRUCTIONAL TELEVISION'S USE AND EFFECT ON EDUCATION IN SOUTH CAROLINA. THE STUDY SHOULD INCLUDE RECOMMENDATIONS FOR ESTABLISHING A METHODOLOGY FOR THE MEASUREMENT AND EVALUATION OF INSTRUCTIONAL TELEVISION'S EFFECT ON EDUCATION IN SOUTH CAROLINA THAT CAN BE USED BY ETV OR ITV ON A CONTINUING BASIS.

THE EXPENDITURE OF STATE FUNDS FOR INSTRUCTIONAL RADIO PROGRAMMING AND BROADCASTING IN THE PUBLIC SCHOOLS SHOULD BE DISCONTINUED.

- (3) THE OFFICE OF ITV AND RADIO SHOULD REVISE THE UTILIZATION SURVEY TO DETERMINE THE AMOUNT OF TIME ITV IS USED AND THE NUMBER OF ITV PROGRAMS USED IN A SERIES.
- (4) THE ETV COMMISSION SHOULD GIVE SERIOUS CONSIDERATION TO THE COSTS AND BENEFITS TO BE DERIVED FROM THE OPERATION OF ANY ADDITIONAL REGIONAL STUDIOS FOR WHICH COMMITMENTS HAVE NOT BEEN MADE. THE

COUNCIL'S FINDINGS SHOULD BE USED TO SUPPLEMENT THE COMMISSION'S 1979 STUDY.

- (5) ETV SHOULD COMMISSION A SURVEY OF THE VIEWING AUDIENCES IN THOSE AREAS OF THE STATE NOT CURRENTLY COVERED BY EXISTING SURVEYS. AREAS THAT ARE COVERED BY NIELSEN RATINGS BUT DO NOT MEET ESTABLISHED REPORTING STANDARDS SHOULD BE INCLUDED IN THIS PROCESS.
- (6) THE GENERAL ASSEMBLY SHOULD CONSIDER DISCONTINUING THE FUNDING OF TAPE AND DELAY CENTERS AND THE LEASING OF LOCAL CLOSED CIRCUIT CHANNELS FOR TAPE AND DELAY CENTERS.
- (7) ETV SHOULD EVALUATE REMOTE PRODUCTION VEHICLE REQUIREMENTS IN ORDER TO DETERMINE THE PROPER NUMBER OF VEHICLES THAT WOULD MEET EXISTING PRODUCTION REQUIREMENTS. IF IT IS DETERMINED THAT A LESSER NUMBER OF VEHICLES ARE NEEDED, OR SOME CURRENT AGENCY VEHICLES ARE SUITABLE TO PERFORM PRODUCTION ACTIVITIES, THOSE VEHICLES NOW PERFORMING THESE ACTIVITIES

SHOULD BE DISPOSED OF IN A MANNER BENEFICIAL TO THE STATE.

- (8) ETV SHOULD CHARGE AN ANNUAL SUBSCRIPTION FEE FOR THE ETV GUIDE PROVIDED TO ETV ENDOWMENT MEMBERS, IN-STATE SUBSCRIBERS AND OUT-OF-STATE SUBSCRIBERS TO COVER THE COST OF PROVIDING THE ETV GUIDE. STATE FUNDS FOR ETV SHOULD BE REDUCED BY THE AMOUNT OF SAVINGS REALIZED.
- (9) ETV SHOULD TERMINATE THOSE SCHOOLS SHOWING NO UTILIZATION OF CLOSED CIRCUIT SERVICES. STATE FUNDS FOR ETV SHOULD BE REDUCED BY THE AMOUNT OF SAVINGS REALIZED.

ETV SHOULD NEGOTIATE A CONTRACT WITH PUBLIC UTILITIES FOR THE EXPENDITURE OF STATE-APPROPRIATED FUNDS FOR CLOSED CIRCUIT SERVICES TO PUBLIC SCHOOLS.

ETV SHOULD DEVELOP WRITTEN PROCEDURES FOR TERMINATION OF SCHOOLS SHOWING MINIMAL UTILIZATION.

BASED ON THE COST SAVINGS AFFORDED BY VIDEO TAPE DUPLICATION AS COMPARED TO THE

CLOSED CIRCUIT SYSTEM, ETV SHOULD GIVE CAREFUL CONSIDERATION TO THIS ALTERNATIVE IN DECISIONS TO EXPAND ITV CAPABILITY TO ADDITIONAL SCHOOLS.

(10) THE STATE PERSONNEL DIVISION SHOULD REVIEW ALL HIRING PRACTICES BY THE ETV COMMISSION AND MAKE RECOMMENDATIONS TO THE BUDGET AND CONTROL BOARD TO CORRECT ANY HIRING DEFICIENCIES.

(11) THE GENERAL ASSEMBLY SHOULD CONSIDER LEGISLATION WHICH ESTABLISHES PRIORITIES AND PROCEDURES FOR STATE AGENCIES TO HIRE PRIVATE ATTORNEYS. THE STATE ATTORNEY GENERAL SHOULD HAVE THE AUTHORITY TO SELECT THE ATTORNEY FOR THE AGENCY. THE PROCEDURES SHOULD STIPULATE WHAT SERVICES ARE TO BE PERFORMED, THE DURATION OF THE APPOINTMENT WITH APPROVAL FOR RENEWAL REQUIRED ONCE A YEAR, THE RATE OF COMPENSATION, AND WHAT SERVICES ARE ACCEPTABLE FOR PAYMENT. BILLING PROCEDURES SHOULD INCLUDE SERVICES PERFORMED, COMPUTED ON A TIME BASIS AT AN HOURLY RATE OF COMPENSATION.

(12) ETV SHOULD DEVELOP A POLICIES AND PROCEDURES
MANUAL ADDRESSING OVERALL ETV OPERATIONS,
ADMINISTRATION AND MANAGEMENT PROCEDURES
OF THE AGENCY.

CHAPTER I
INTRODUCTION, BACKGROUND AND HISTORY

Introduction

The South Carolina Educational Television Commission (ETV) was created by the General Assembly in Part II, Section 9 of Act 802 of 1960, and charged with developing an educational communications system as needed to "develop, promote and extend educational programs to meet the needs of the State and its citizens." In carrying out its mandate, ETV transmits educational programs to the State's public schools, institutions of higher education, other State agencies and the general public through a statewide multi-channel closed circuit network and open circuit broadcast transmitters. ETV also assists State schools and agencies with the development of instructional and educational materials such as educational radio programs, films, slides, tapes and printed materials and with other communications needs.

History

The General Assembly passed a Concurrent Resolution during FY 57-58 which requested that a study be conducted of the use of television in the State's public schools. Following a pilot project which offered instructional television courses in three subjects to students in five Columbia schools, the General Assembly created the South Carolina Educational Television Commission in the 1960-61 Appropriation Act (now Section 59-7-10 of the 1976 Code of Laws). The Commission placed early emphasis on the expansion of the closed circuit network to provide courses of instructional programming to the State's public schools, institutions of higher education, medical facilities and in other areas.

By FY 62-63 the closed circuit network had expanded to all 46 counties, reaching public elementary and high schools, most State colleges and university extension centers and some hospitals and private colleges and universities.

In September 1963, the ETV Network signed-on its first open circuit station in Greenville and followed that several months later with the signing-on of a station in Charleston. By 1968 additional transmitting stations were operational in Columbia, Florence and Barnwell, continuing to increase the area of coverage within the State for transmitting educational programs through open circuit channels.

During FY 68-69, the National Public Broadcasting Network was established, interconnecting all educational television stations in the country. At this time the South Carolina ETV Network became the feeder point for public broadcasting for all ETV stations in the Southern states. In May 1978, ETV joined the PBS satellite system to link public television stations in all 50 states, Puerto Rico and the Virgin Islands.

In 1969 ETV's Education Department was moved to the State Department of Education (SDE) to form the Office of Instructional Television (later to include radio). The move was made to allow more involvement by SDE in the development of instructional materials for the public schools.

In 1971 ETV's legislation was amended to allow ETV to purchase and operate educational television, radio and related equipment required to "develop, promote and extend educational programs to meet the needs of the State and its citizens." Consequently, ETV began operation of its FM educational radio network with the sign-on of the Greenville station in September 1972 which made possible the beginning of services

for blind and other handicapped citizens, as well as continuing services to medical personnel, adult education, law enforcement personnel and many other groups. Other FM radio stations were later added to the ETV radio network in Charleston, Sumter, Columbia, Rock Hill and Beaufort. Educational radio services expanded in February 1976 with instructional radio courses offered for the first time to the public schools.

During FY 71-72 ETV began operating local tape and delay centers in the State for rebroadcasting instructional programs to the schools. Increases in ETV services were made in the field of higher education as five open circuit courses were offered for college credit at home and over 50 full-credit courses were offered on the closed circuit network.

Open circuit stations in Sumter and Beaufort signed-on in September 1975 as the first of a series of ETV regional stations with local production studios provided by local communities. In January 1978 another regional studio opened in Rock Hill with a limited broadcast schedule that expanded during the year to become a full-service television station. Other regional facilities are planned for operation in Spartanburg, Greenwood and Conway.

Commission Membership

The South Carolina Educational Television Commission is composed of twelve members. The five ex officio members are the Chairmen of the Senate Finance Committee, Senate Education Committee, House Ways and Means Committee, House Education Committee and the Superintendent of Education. The Governor appoints seven members, one from each of the six Congressional Districts and one from the State at-large.

The term of office of the ex officio members is the same as the term of office to which each is elected and the term of office of the appointed members is six years.

SOUTH CAROLINA EDUCATIONAL TELEVISION COMMISSION

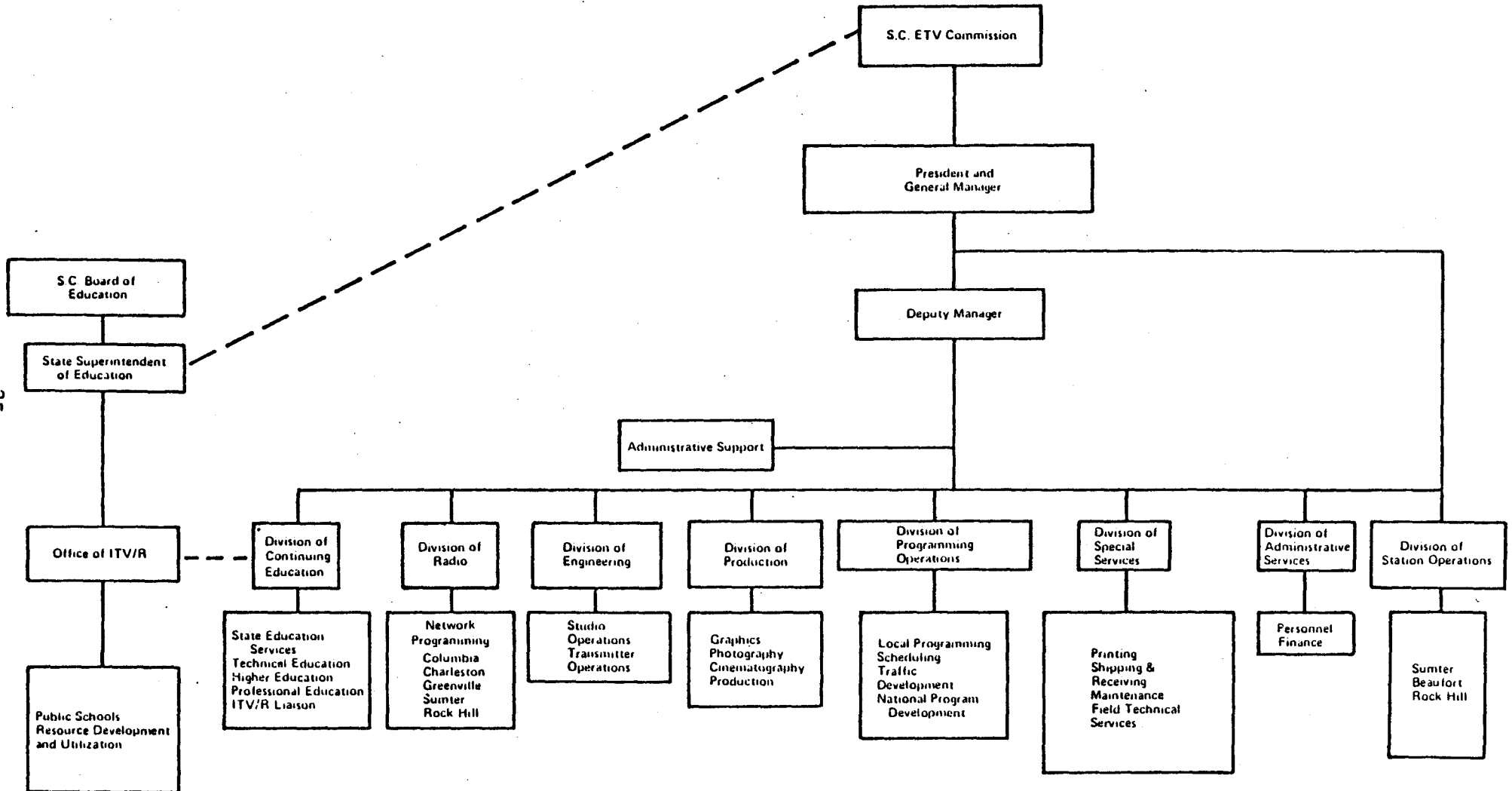


TABLE 1

ETV SOURCE AND APPLICATION OF FUNDS

FY 75-76 TO FY 79-80

	<u>FY 75-76</u>	<u>FY 76-77</u>	<u>FY 77-78</u>	<u>FY 78-79</u>	<u>FY 79-80</u>
Expenditures					
Personal Services	\$3,021,703	\$ 3,362,099	\$ 3,829,239	\$ 4,568,335	\$ 5,123,935
Other Operating Expenses	5,623,471	7,060,949	6,935,422	8,121,191	11,114,085
Employee Fringe Benefits	11,811	30,325	591,170	713,035	820,577
Total Expenses	\$8,656,985	\$10,453,373	\$11,355,831	\$13,402,561	\$17,058,597
Percentage of Change From Year to Year		21%	9%	18%	27%
Total Personnel	289	374	397	415	434
Revenues					
General Fund Appropriations					
Balance From Prior Year	-	-	-	\$ 335,164	\$ 2,209,505
Appropriation	\$7,315,670	\$ 7,706,589	\$ 8,703,646	9,527,474	10,604,764
Supplemental Appropriation	-	50,000	335,164	2,209,505	50,000
Lapsed	(35,366)	(190,783)	(121,342)	(34,914)	(73,393)
Carried Forward	-	-	(335,164)	(2,209,505)	(50,000)
Federal Funds	291,829	65,491	316,258	164,486	819,708
Other Funds	<u>1,084,852</u>	<u>2,822,076</u>	<u>2,457,269</u>	<u>3,410,351</u>	<u>3,498,013</u>
Total Revenues	\$8,656,985	\$10,453,373	\$11,355,831	\$13,402,561	\$17,058,597

Notes:

(1) Source of Information: State Budget Documents and ETV Finance Director

TABLE 2

OFFICE OF INSTRUCTIONAL TELEVISION (SDE) APPLICATION OF FUNDS

FY 75-76 TO FY 79-80

	<u>FY 75-76</u>	<u>FY 76-77</u>	<u>FY 77-78</u>	<u>FY 78-79</u>	<u>FY 79-80</u>
Expenditures					
Personal Services	\$301,900	\$366,499	\$359,394	\$408,121	\$464,404
Other Operating Expenses	205,382	256,924	277,130	216,209	231,751
Total Expenses (1)	\$507,282	\$623,423	\$636,524	\$624,330	\$696,155
Percentage of Change From Year to Year		23%	2%	-2%	12%
Total Personnel	27	28	28	27	28

Notes:

- (1) Total expenses do not include employee fringe benefits for the Office of Instructional Television.
- (2) Source of Information: State Budget Documents and SDE Office of Finance.

CHAPTER II

EDUCATIONAL TELEVISION OPERATIONS

Utilization of Television Equipment in Public Schools

Introduction

The Office of Instructional Television (ITV) and Radio in the Department of Education and the Educational Television Commission (ETV) have not ensured the effective utilization of educational television equipment in South Carolina. The two agencies have failed to redistribute surplus equipment from schools not using instructional television to schools needing the equipment, to account for televisions provided to these schools, and to ensure adequate and equitable procedures for providing new television sets to public schools.

The Office of ITV and Radio signs a contract with public schools when State funds are used in the purchase of television equipment for public schools. The contract provides that ITV or ETV may remove the equipment if not used within two years. ETV does not sign the contract, but provides the State funds for purchasing the equipment. ITV conducts a television usage survey once a year of the schools and produces a computer printout of the results entitled "Utilization Printout."

To determine if any surplus television sets existed in public schools, the Audit Council reviewed the ITV utilization report provided by the Office of ITV and Radio. The report identified two categories: schools with televisions that use no ITV, and schools having more televisions than teachers using them. The Audit Council defined a surplus set as one not used once the entire school year. If a teacher turned the television set on once during the year, the teacher is considered a user of ITV.

Surplus Television Sets

Neither ITV nor ETV have ensured that unused television sets purchased with State funds are removed from schools and redistributed. The Audit Council found that there were 2,415 operable television sets that were not used for school year 1978-79. A total of 1,466 operable television sets were identified as not used for two consecutive school years (1977-78 and 1978-79). Assuming all sets were black and white, the 1,466 sets would have a market value of \$73,300 and a replacement cost of \$258,016.

For the school year 1978-79, the Council determined that there were 2,415 operable television sets not used. This number consisted in part of 1,959 surplus televisions in schools that used some instructional television. The remaining 456 unused televisions were in public schools which the utilization report identified as not using instructional TV for the school year. Schools may have a justified reason for not using instructional television for a year. For example, one school with 24 surplus sets was closed for remodeling. Other schools may be experiencing similar problems contributing to unused sets. To eliminate these types of discrepancies, the Audit Council then examined the records for two consecutive years, 1977-78 and 1978-79.

The Council identified 1,466 idle televisions for two consecutive school years, 1977-78 and 1978-79. The televisions were operable. There were 99 schools that used no instructional television for two consecutive years and these schools had on hand 266 operable televisions. The Council also found 1,200 surplus sets (operable) in schools that used some instructional television.

Next, the Audit Council examined two previous school years, 1971-72 and 1974-75, in order to determine if under-utilization has been

a recurring problem. Table 3 shows that the problem of under-utilization of TV sets has been extensive for several years. The analysis revealed that 32% of the TV sets in 1971-72 were not used once and 31.4% were not utilized in 1974-75.

TABLE 3
TELEVISION SET UTILIZATION IN SOUTH CAROLINA
PUBLIC SCHOOLS BY SCHOOL YEAR*

<u>School Year</u>	<u>Total TV Sets Available</u>	<u>Number of TV Sets Not Used</u>			<u>Percent Sets Not Used</u>
		<u>In Schools Not Using ITV</u>	<u>In Schools Using ITV</u>	<u>Total Surplus</u>	
1971-72	7,208	830	1,472	2,302	32.0
1974-75	9,848	593	2,499	3,092	31.4
1978-79	11,502	576	2,424	3,000	26.1

*Includes some inoperable sets. In school year 1978-79, 8% of the sets available were inoperable.

Source: South Carolina Department of Education, Instructional Television Utilization Printouts.

The Audit Council compared the total number of sets with the total number of teachers using ITV, and found that there has been more than one set per using teacher since 1971-72. In 1971-72, there were 1.3 televisions per ITV teacher, 1.2 televisions per ITV teacher in 1974-75, and 1.1 televisions per ITV teacher in 1978-79 (see Table 4). This indicates that there are enough sets for using teachers statewide. However, Table 3 which is based on an analysis of each school, indicates that televisions are improperly distributed among schools.

TABLE 4
TOTAL TELEVISION SETS AVAILABLE TO TOTAL
ITV TEACHERS BY SCHOOL YEAR

<u>School Year</u>	<u>Number</u>		<u>Television Sets Per ITV Teacher</u>
	<u>Television Sets</u>	<u>ITV Teachers</u>	
1971-72	7,208	5,658	1.3
1974-75	9,848	8,115	1.2
1978-79	11,502	10,823	1.1

Source: Department of Education, Office of ITV, Utilization Printouts.

The Council visited several school districts. One district had 57 operable television sets in schools that did not use any ITV for 1978-1979. The district also had 273 surplus operable sets in schools that used some ITV for a total of 330 surplus sets. One school had three televisions that were still in the shipping boxes. The principal stated that they had never been used and had been in storage for nine years. In another district, the Audit Council discovered ten sets in storage in the county school district office. No school officials knew how long the sets had been in storage.

Notwithstanding the supply of unused televisions, ETV continues to purchase new sets. For example, the district referred to above with 330 surplus operable sets, received four new television sets, at a cost to the State of \$1,279 in 1978-79. In 1979-80, the district received five more new television sets at a cost to the State of \$1,515.

The Office of ITV and Radio requires each school that receives equipment through State funds to sign a contract agreeing to use the

equipment or have it removed and placed in schools that want ITV resources. The contract states in part:

I understand that television sets, stands, radios and videotape machines furnished by South Carolina ETV Network-FTS to schools and districts may remain in the schools in which placed as long as this equipment is used in any given year. If unused during a school year, the district or area superintendent may elect to move this "matching" equipment furnished by ETV to another school. If the equipment is not used during a second year, South Carolina ETV or the Office of ITV, through its local regional consultant, may pick up the equipment and reassign it to a different school district determined to be in need of such equipment.

The Office of ITV and ETV have utilization statistics showing where surplus sets are located, as well as where needs may be. The effective use of State funds requires that unused equipment should be identified and redistributed to schools desiring instructional television.

The non-usage of 1,466 operable television sets for two consecutive years (1977-79) has resulted in an inefficient use of tax dollars. At a fair market value of \$50 per set, the value of the surplus sets was \$73,300, assuming all the sets were black and white. Present replacement value is \$176 per set, or \$258,016 for 1,466 surplus sets. If sets were properly redistributed as stated in the contract to schools that express a desire to use ITV, the purchase of new sets could be dramatically reduced. ETV and ITV have made little attempt to shift sets from non-using schools. Yet, ETV continues to request funds from the General Assembly and purchase sets for schools that do not need them. Since 1971-72, ETV has been appropriated \$825,000 primarily for television equipment.

ETV has recommended in their Plan for the 80's, \$900,000 a year for the next five years to replace old sets and place additional sets in

public schools. For school year 1978-79, there were more than enough sets to ensure a ratio of one set per using teacher if properly distributed. The 1,466 idle, operable sets could eliminate the need for additional sets.

The failure to ensure redistribution of unused televisions is caused by several factors. The first is the failure of ETV and ITV to enforce their contract with public schools. ETV and ITV officials have stated that the contract is not enforceable because it is not legally binding. However, an Attorney General's opinion, requested by the Audit Council, stated in part that there appears to be no reason why the contract concerning the use and custody of equipment could not be enforced by the ETV Commission or ITV through appropriate legal measures. Also, ETV's goal is to have a television set for every two teachers in the State. This goal fails to take into account that not all teachers use or will ever use ITV. In 1979 there were enough televisions for every teacher who wanted to use ITV. Also, contributing to the surplus is the feeling by ITV and ETV that if a television set is left in a school long enough, eventually it will be used.

Failure to Account for Equipment Provided for Public Schools

ETV has failed to account for televisions, stands, videotape machines, and related equipment purchased with State funds for public schools. From 1971 to 1980, ETV was appropriated \$825,000 for reception equipment which includes black and white televisions, color televisions, television stands and videotape recorders. FM radios were purchased beginning in 1976. According to ETV officials, public schools in most instances have matched ETV's purchases on at least an equal basis. However,

neither ETV nor ITV have maintained an inventory. Furthermore, equipment serial numbers were not recorded prior to 1978. These practices have resulted in \$750,000 of unaccountable equipment. Due to the lack of inventory records, State-purchased equipment cannot be identified from locally-purchased equipment.

The Office of Instructional Television and Radio requires all schools receiving equipment with State funds to sign a contract to guarantee efficient and effective equipment use. The contract states that "ETV retains control of ETV purchased sets and other TV equipment..." Since ETV retains control of the equipment, they should ensure proper accountability by maintaining an inventory.

An Attorney General's opinion concerning the ownership of TV sets, states in part:

...The Educational Television Commission as an agency of the State of South Carolina owns the television equipment, or any interests therein purchased with its appropriated funds; ...and the Commission should be responsible for the annual inventory of this equipment required by Section 10-1-140.

South Carolina Code 10-1-140 requires a property inventory as follows:

The head of each department, agency or institution of this State, which employs more than one hundred permanent employees, shall be responsible for all personal property under his supervision and each fiscal year shall make an inventory of all such property under his supervision, except expendables.

Federal property management standards are provided in Federal Management Circular (FMC) 74-7 Attachment N which states:

Property records shall be maintained accurately and provide for: a description of the property; manufacturer's serial number or other identification number; acquisition date and cost; source of the property ...location, use, and condition of the

property... A physical inventory of property shall be taken and the results reconciled with property records at least once every two years to verify the existence, current utilization and continued need for the property. [Emphasis Added]

No inventory control can allow the undetected theft or misuse of government property, unnecessary duplicative purchasing of equipment, distorted budget projections for future equipment needs, and thus results in a waste of taxpayers' money.

Also, the contract to shift television sets cannot be effectively enforced because equipment purchased with State funds prior to 1978 cannot be identified. Since the equipment cannot be identified for redistribution, unused equipment remains idle in many public schools. Televisions with a replacement value of \$258,016 were unused for a minimum of two consecutive years (1977-1979). During this same two-year period, the Educational Television Commission requested and received from the General Assembly \$87,500 to purchase more television sets.

The reason ETV does not inventory reception equipment is because they do not consider it their property. Once the equipment is placed in the schools, ETV officials stated they no longer retain control.

Inadequate Procedures for Providing Reception Equipment

The Office of Instructional Television and Radio in the State Department of Education has inadequate procedures for allocating new reception equipment purchased with State funds to public schools. The procedure for determining which schools should receive State aid for television and radio equipment is not based on need. The failure to distribute equipment based on actual need has resulted in schools and districts with low utilization receiving additional sets. Schools and districts with surplus

sets are not encouraged to reallocate their present sets to achieve maximum utilization.

For program administration, the Office of ITV divides the State into six regions; five approximately the same size and the sixth, Richland County, considerably smaller. A utilization consultant assigned to each area is in charge of administering reception funds.

ITV distributes funds to the five larger areas equally and Richland County receives a smaller share. This policy fails to take into account that one district may have a greater need than another district. For example, in school year 1979-80, \$35,750 was allocated to ITV for reception equipment. This money was distributed as follows:

<u>Field Office</u>	<u>Total</u>
Aiken	\$ 6,790
Charleston	6,790
Florence	6,790
Greenville	6,790
Rock Hill	6,790
Columbia	<u>1,800</u>
	\$35,750

ITV's policy for the administration of school reception equipment funds states in part:

Funds are allocated by the Office of ITV and Radio to schools based on educational needs and educational commitments to use the equipment. Schools desiring an allocation must make a request to the Office of ITV and Radio. Allocations are based on educational needs and commitment to use the equipment as determined by conferences with administrators. Requests for allocations are received by ITV and prioritized on the basis of conferences with school administrators. Placements are based upon our judgment that, of all the requests for them, they will best serve local educational needs.

ITV does not apply their policy to the State as a whole but to each individual utilization region. This assumes that all regions are equal in need. Schools and school districts receiving reception equipment funds should be based on need and utilization of television sets. The distribution of resources should not be on a "slice of the pie" concept. ITV utilization reports can serve as a useful aid for ensuring that funds be allocated to schools based on needs.

In a memorandum to utilization consultants on August 14, 1979 for the 1979-80 school year, the utilization supervisor attempted to ensure some equity. The supervisor stated that consultants should avoid placements where reports indicate unused equipment.

ITV, however, did not adhere to this policy and surplus sets were placed where not needed. For example, one school district had 57 operable sets in the 1978-79 school year in schools that used no ITV. For the same year, a school in this district using ITV had 20 operable sets and only 11 teachers that used ITV. However, after examining these statistics, the Office of ITV still provided funds to match the purchase of another set for this school for 1979-80. The Audit Council also found that two of five schools that received State matching funds in this district already had a surplus of sets. Furthermore, additional purchases could have been avoided if sets were adequately redistributed.

The Audit Council found that in one instance, the utilization supervisor for the State violated his own guidelines of August 14, 1979 for distributing reception equipment funds. One school received a new set through matching funds, although on the utilization report the school showed a surplus of six sets. The principal of the school stated that the set had not been requested and that it "arrived in a box on

the doorstep one day and I thought the set was shipped to the wrong school." Upon further investigation, the Council learned that the utilization supervisor gave \$1,000 to the associate superintendent to spend as needed for TV equipment.

The lack of adequate procedures for allocating new reception equipment is due to adopting a policy giving each utilization consultant the same amount of funds to allocate to his district. The utilization supervisor stated that he tries to divide the funds equally across the State. Since his district (Richland County) is smaller, he receives a smaller share. Also, the utilization supervisor has not followed up on instructions to regional utilization consultants to ensure sets are not placed in schools with surplus sets.

RECOMMENDATIONS

ETV SHOULD DEVELOP A COMPLETE INVENTORY DESCRIPTION OF EQUIPMENT PURCHASED WITH STATE FUNDS IN PUBLIC SCHOOLS. THE INVENTORY SHOULD CONTAIN INFORMATION SUCH AS MANUFACTURER'S NAME, TRADE NAME, SIZE, COLOR, AND MODEL NUMBER.

ANY EQUIPMENT IDENTIFIED AS PROPERTY OF SOUTH CAROLINA ETV LOCATED IN SCHOOLS THAT USE NO ITV, OR SCHOOLS USING ITV BUT HAVE SURPLUS EQUIPMENT, SHOULD BE REMOVED AND PLACED IN SCHOOLS NEEDING THE EQUIPMENT WITHIN THAT DISTRICT. IF NO EQUIPMENT IS

NEEDED WITHIN THAT DISTRICT, THE EQUIPMENT SHOULD BE PLACED IN ANOTHER DISTRICT WHERE IT WOULD BE USED.

ITV REGIONAL CONSULTANTS SHOULD ADVISE SUPERINTENDENTS AND MEDIA SPECIALISTS CONCERNING SURPLUS EQUIPMENT IN SCHOOLS AND MAKE RECOMMENDATIONS FOR SHIFTING SETS WHEREVER POSSIBLE.

STATE MATCHING FUNDS SHOULD BE PROVIDED TO SCHOOLS BASED ON A NEEDS ASSESSMENT OF THE ENTIRE STATE RATHER THAN LIMITING THE NEEDS ANALYSIS TO EACH DESIGNATED UTILIZATION DISTRICT.

Public School Usage of Instructional Television and Radio

Introduction

During the course of this audit, several questions were raised concerning the usage of instructional television (ITV) and instructional radio. These questions concerned the utilization of ITV and radio by teachers and students and the accuracy of the statistics collected by the Office of ITV and Radio. To determine the actual usage of ITV resources, the Audit Council surveyed teachers in areas that have high potential for ITV viewing. High potential viewing areas for elementary schools are those with transmitters in the county and for secondary schools, those with tape and delay capabilities. One-thousand surveys were mailed April 29, 1980 and 403 (40.3%) teachers responded.

Questionable Usage of Instructional Television in the Classroom

The Audit Council found that in areas having the highest viewing potential in the State, only 38% (152) of the teachers used any ITV programming in the past week (the week prior to receiving the survey). Another 10% (41) stated that they had used ITV some in the past month but not in the past week. A total of 37% (147) did not use any ITV during the school year. Of the 63% of teachers that used ITV, 83% (209) stated they used it less than two hours a week or 24 minutes a day for all of their classes (see Table 5).

TABLE 5
HOURS OF ITV USED PER WEEK BY TEACHERS*

<u>Hours Per Week</u>	<u>Number of Teachers Using</u>			<u>Percent of Total</u>
	<u>Elementary</u>	<u>Secondary</u>	<u>Total</u>	
Less than $\frac{1}{2}$ hour	25	33	58	23.1
$\frac{1}{2}$ and under 1 hour	42	21	63	25.0
1 and under $1\frac{1}{2}$ hours	42	21	63	25.0
$1\frac{1}{2}$ and under 2 hours	22	3	25	10.0
2 and under 3 hours	16	7	23	9.3
3 and under 4 hours	2	5	7	2.8
4 and under 5 hours	3	2	5	2.0
5 or more hours	<u>3</u>	<u>4</u>	<u>7</u>	<u>2.8</u>
	155	96	251	100

Source: LAC Survey.

*Asked only of teachers using any ITV in 1979-80.

A 1977 Corporation for Public Broadcasting Survey found that 32% of the nation's teachers used two or more hours of ITV per week. In its survey, the Audit Council found that only 17% of South Carolina's teachers in the highest potential viewing areas used more than two hours per week.

In the 20 years of its existence, neither ETV nor ITV have established a method to measure the impact of Instructional Television on education in South Carolina. ETV and ITV cannot tell if students in South Carolina have benefited anymore from instructional television than from other instructional methods. No criteria exists to determine how much ITV should be used or whether ITV improves student performance anymore than the use of filmstrips, instruction by the classroom teacher, or other less expensive alternatives.

During Fiscal Year 1979-80, the State spent an estimated \$4 million to lease closed circuit channels, to compile utilization statistics, develop resources and promote utilization of ITV and radio. ETV's total expenditures for FY 78-79 were \$13,402,561. This is a growing annual expense for which ETV cannot accurately determine the educational benefits gained by public school children in South Carolina.

ITV has designed instructional television to be a supplement or teacher's aid in the classroom. Teachers use ITV in the same manner as a filmstrip or any other teacher's aid. The Audit Council survey found that 87% (216) of the teachers using ITV stated they use ITV as an aid or resource, whereas only 11% (28) disagreed with this type usage of instructional television. In interviews with the Audit Council, ITV officials stated that the amount of ITV used is not important, but the resource should be made available for teachers to use in their curriculum if possible.

Questionable Usage of Instructional Radio in the Classroom

The Audit Council survey included schools capable of receiving Instructional Radio programming and found the usage of this resource to be low. The schools surveyed were in areas with radio transmitters. The survey was conducted to determine public school usage of instructional radio and did not measure how often the general public listens to public radio. The Council found that 91.1% (350) of the teachers had not used any instructional radio the entire school year and 81.5% (313) had never used it. Only 1.6% (6) of the teachers used any instructional radio in the past week (see Table 6).

TABLE 6
TEACHER USAGE OF INSTRUCTIONAL RADIO

	<u>Teacher</u> <u>Number</u>	<u>Response</u> <u>Percent</u>
In the Past Week	6	1.6
In the Past Month	10	2.6
In the Past Year	18	4.7
Have Used Instructional Radio But Not in Past Year	37	9.6
Never Used Instructional Radio	<u>313</u>	<u>81.5</u>
TOTAL	384	100

Source: LAC Survey.

ETV and ITV have not established a method to measure the impact of instructional radio on education and do not know if instructional radio improves the educational performance of students exposed to this resource. Therefore, no criteria exist to determine how much instructional radio should be used.

The Educational Television Commission spent \$427,474 to construct five radio stations across the State, excluding a Beaufort station which opened in August 1980. These stations are used to broadcast public radio programs for the general public and instructional radio programs for public schools.

ETV officials stated that in FY 78-79, approximately \$50,000 could have been saved in personnel and operating costs by eliminating instructional radio. In addition, these budget reductions would not affect public radio broadcasting.

There are many resources and supplements available for teachers that appear to be preferred to radio programs, and this is one reason instructional radio usage is low. ITV officials stated that not all teachers will use or are expected to use instructional radio. ITV states another reason for low radio usage is because of scheduling problems. The Division of Radio does not have taping capability and if a teacher misses a program, she cannot obtain a tape for later use.

RECOMMENDATIONS

THE EXPENDITURE OF STATE FUNDS FOR INSTRUCTIONAL RADIO PROGRAMMING AND BROADCASTING IN THE PUBLIC SCHOOLS SHOULD BE DISCONTINUED.

ETV IN COOPERATION WITH THE OFFICE OF ITV SHOULD CONTRACT WITH AN INDEPENDENT PARTY TO CONDUCT AN IN-DEPTH STUDY OF INSTRUCTIONAL TELEVISION'S USE AND EFFECT ON EDUCATION IN SOUTH CAROLINA. THE STUDY SHOULD

INCLUDE RECOMMENDATIONS FOR ESTABLISHING
A METHODOLOGY FOR THE MEASUREMENT AND
EVALUATION OF INSTRUCTIONAL TELEVISION'S
EFFECT ON EDUCATION IN SOUTH CAROLINA
THAT CAN BE USED BY ETV AND ITV ON A
CONTINUING BASIS.

Information Concerning the Utilization of Instructional Television
and Radio

The Office of Instructional Television (ITV) and Radio in the State Department of Education conducts an annual survey to determine the number of students and teachers using ITV and Radio resources. This information is used as a justification for budget requests and cost effectiveness by ETV.

The Council concludes that the information provided to the Legislature concerning the use of Public School Instructional TV and Radio is inadequate, misleading, inaccurate and is thus an insufficient basis for sound decision-making. This is discussed in detail on the following pages.

Inadequate Information

The information collected and reported by the Office of ITV and Radio does not provide an adequate indication of the extent students or teachers use ITV and Radio. The amount of time ITV and Radio is utilized is not known by the Office of ITV and Radio or the Educational Television Commission. All that is known is the number of students or teachers who viewed ITV at least once during the year. The Office of

ITV and Radio counts all students as viewing ITV equally, regardless of whether they view one program or fifty programs during a year. In addition, teachers are counted as either using or not using ITV, with the amount of usage unknown. If a teacher uses ITV only once in the school year, the teacher is counted the same as one who uses it on a regular basis.

The Office of ITV and Radio has, on two occasions, determined the extent ITV programs are used. However, this information has not been made available to the General Assembly. In school year 1971-72, ITV surveyed teachers and found they used 46% of the programs available. In school year 1976-77, the Office of ITV and Radio asked teachers to indicate how many programs of a series they used. Statewide, teachers reported using 29% of the programs available.

Misleading Information

ETV reports information concerning utilization as course enrollment. This information is misleading because there are no students actually enrolled in ITV, and there are no ITV courses per se.

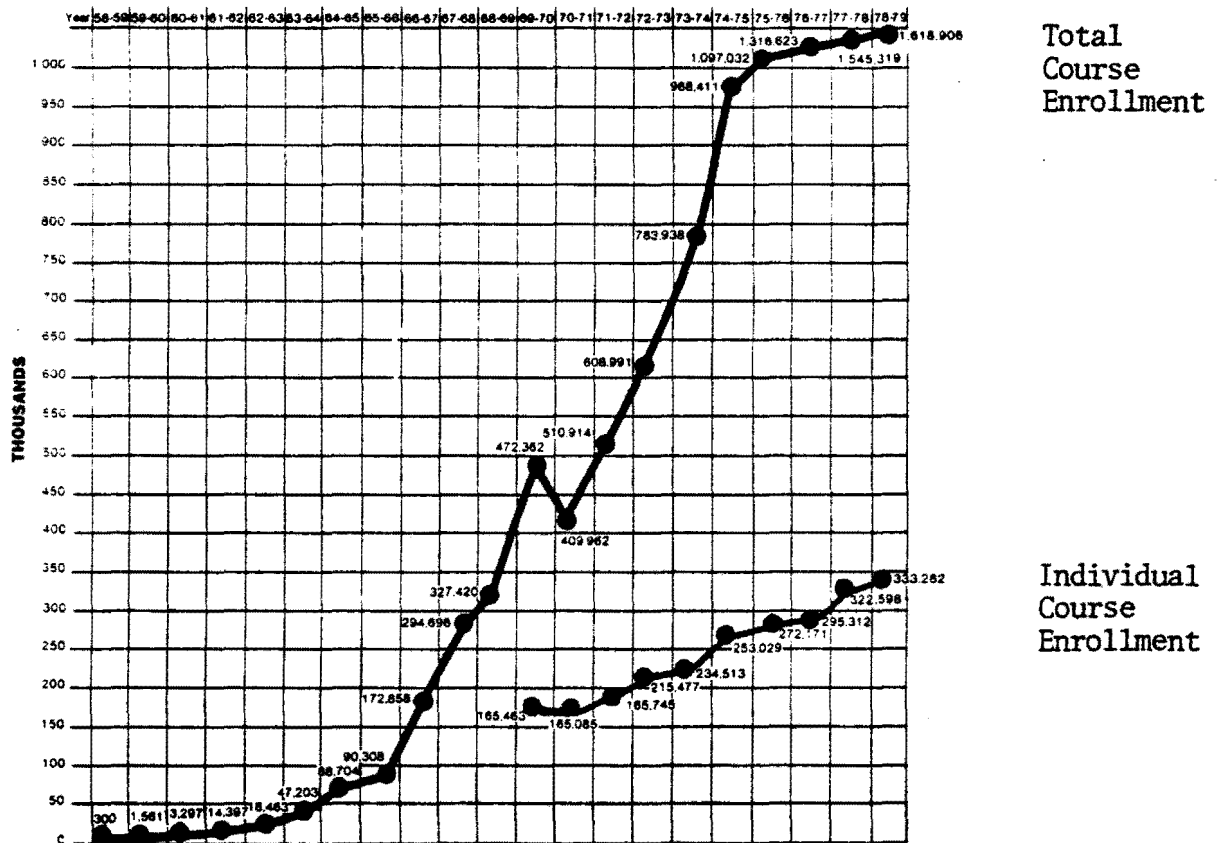
The word "enrollment" is misleading. Students are not enrolled in instructional television courses as they are in school or university courses. For example, students using ITV programs are not required to take exams or attend television classes regularly. The Office of ITV does not have an attendance roll of students using these programs.

In addition, the word "course" is misused. ITV implies that its program series are the primary source of instruction. Instructional Television and Radio is used in the same manner as a filmstrip or

audio-visual aid, and is not designed to be the primary means of instruction. However, ITV and ETV have not reported usage in this manner to the General Assembly, but report all students using ITV as "enrolled in ITV courses" (see Illustration I). ITV's survey asks how many students have viewed instructional television. Students who have viewed any ITV raise their hand and teachers report this number to the Office of ITV and Radio. The Office of ITV and Radio interprets the results of this one question as a count of individual student "enrollment" in ITV "courses."

ILLUSTRATION I

ITV UTILIZATION - 20 YEARS



This chart shows the total number of individual students enrolled in ITV courses as well as the total course enrollment, which counts students each time they are enrolled in a course. Individual student enrollment was not officially documented until 1969-70. For further information, contact S.C. State Department of Education's Office of ITV/IR, 206 Rutledge Building, Columbia, SC 29201.

Inaccurate Information

The Audit Council reviewed past utilization statistics and found instances of inaccurate, exaggerated individual student participation of ITV from 1972 to 1979. For example, in school year 1978-79, 74 schools were reported having 1,743 more individual students "enrolled in ITV" than students enrolled in the school. The "individual student enrollment count" only counts a student once regardless of how many series the student has viewed. Consequently, there should never be more individual students participating in ITV than students enrolled in the school. One school had an enrollment of 551 students but reported an ITV "enrollment" of 705 students, or 154 more ITV students than enrolled in the school. Another school had an enrollment of 135 students but reported an ITV "enrollment" of 512 students, or 377 more ITV students than enrolled in the school. Such inaccuracies have been perpetuated at least since 1972.

The pertinent factors that can be used as criteria for evaluating the acceptability and usage of ITV by students and teachers were developed by the Corporation for Public Broadcasting in its 1977 School TV Utilization Study (SUS). This survey considered such factors as availability, commitment, actual use and attitudes in order to ascertain the role of television in the classroom. The survey addressed issues such as TV reception, the condition of equipment, time used, regular usage, the value of ITV programs, preparation and follow-up of programs and teacher attitudes.

Without accurate knowledge of television and radio usage in public schools, ITV and ETV managers are hampered in their decision-making. The Office of ITV and Radio and ETV cannot ensure that television and

recording equipment is efficiently allocated to those schools that need it most. Television sets and radios are not placed in schools needing more equipment and surplus sets accumulate in schools not needing them (see p. 29). In addition, because the Office of ITV obtains little useful information, funds for the \$3.3 million closed circuit network cannot be expended effectively. For example, it may be economically feasible to terminate a school from closed circuit if the school uses ITV only once a year but that information is not available.

As a result of ITV's surveys, the General Assembly has been presented with insufficient reports of ITV usage. The information is given to the Budget and Control Board and the General Assembly as a justification for budget increases, but they are not informed that teachers use television in the same manner as a filmstrip or other aid. They do not have information that shows that most teachers use it less than two hours per week for all classes (see p. 40).

Adequate information is not available because management has neglected to ensure that accurate and reliable statistics are collected. One factor relating to inadequate information is ITV's philosophy that "it is not important how much teachers use ITV, but that they know what is available to use in their curriculum if possible." Also, ITV officials stated that teachers are hesitant to complete longer surveys.

ITV officials have stated that the individual student "enrollment" may exceed school enrollment because of the State Department of Education's method of measuring school enrollment. The Office of ITV and Radio uses the Basic Educational Data System (BEDS) report for student enrollment. This is the average daily attendance for the first 15 days.

Students may have moved into the school after the BEDS attendance report was taken, accounting for a small discrepancy in ITV "course enrollment" and total school enrollment. However, the utilization supervisor stated that ITV "enrollment" should not exceed ten students more than enrolled in the school.

The utilization supervisor stated that the average number of programs used was not reported because "averages are not important." He further stated that they had difficulties in 1977 getting the information read into the computer.

RECOMMENDATIONS

THE OFFICE OF ITV AND RADIO SHOULD REVISE THE UTILIZATION SURVEY TO DETERMINE THE AMOUNT OF TIME ITV IS USED AND THE NUMBER OF ITV PROGRAMS USED IN A SERIES. ALL PERTINENT INFORMATION SHOULD BE REPORTED TO THE GENERAL ASSEMBLY.

THE OFFICE OF ITV AND RADIO AND ETV SHOULD REPORT INFORMATION CONCERNING STUDENT USAGE OF ITV AS "STUDENTS VIEWING ITV PROGRAMS."

THE OFFICE OF ITV SHOULD REVIEW UTILIZATION STATISTICS TO ENSURE THERE ARE NOT MORE INDIVIDUAL STUDENTS VIEWING ITV THAN STUDENTS IN THE SCHOOL.

ETV AND ITV OFFICIALS SHOULD BASE DECISIONS CONCERNING THE FUNDING OF ITV EQUIPMENT AND RESOURCES ON UTILIZATION REPORTS OF THE AMOUNT OF TIME AND NUMBER OF PROGRAMS IN A SERIES ITV IS USED.

Regional Studios

Introduction

Regional studios serve as facilities for the production of live or delayed broadcast programs such as those aired by regular commercial television stations. The operation of regional or local production studios requires a site for a transmitting tower and building. ETV has constructed these with bond funds authorized by the General Assembly. Studio or production facilities are not located at the transmitting sites. Studios at Beaufort and Rock Hill are housed in space provided by local technical educational colleges, and the studio at Sumter was constructed by Sumter County and the City of Sumter for use by ETV.

ETV's main studio and production center for the State is located in Columbia. Since 1975, ETV has operated regional studios at Sumter and Beaufort, and in 1978, a regional studio at Rock Hill began operations. Equipment requirements include cameras, lighting, air conditioning, audio and video monitors, video tape machines and other related equipment. The three studios collectively employ approximately 57 State funded personnel. Additionally, ETV is planning to operate studios at Spartanburg, Greenwood and Conway.

ETV must apply to the Federal Communications Commission for authority to construct or make changes in noncommercial educational

television stations. ETV operates four transmitter sites or stations near Greenville, Charleston, Barnwell, and Florence. These transmitters provide ETV television signals to areas from the Columbia facility that do not have production studios. A local production studio is not required for a community to receive ETV transmissions because a transmitting tower can provide this capability when the broadcast is relayed from Columbia.

Questionable Need for Regional Studios

The need for regional production studios in South Carolina is questionable. The justification for regional studios was based on the need to service local communities with educational television and the anticipation of the Federal Communications Commission (FCC) requiring local production facilities. However, the FCC allows states to waive local production requirements permitting noncommercial educational stations to locate the main studio elsewhere. South Carolina is decentralizing ETV production and moving toward providing local production capability. Yet, communities can be served with repeater transmitters more economically than by constructing costly regional studios and transmitting towers.

The Audit Council asked the General Manager of ETV to explain the reason why regional production studios were constructed, and several reasons were given. He stated that the Federal Communications Commission looked unfavorably upon licensees who did not have local production facilities to serve local communities. The General Manager also said that regional studios would qualify for Community Service

Grants from the Public Broadcasting Cooperation which would reduce the amount of State funds needed for regional studios. The cost of providing mobile units as an alternative to local production was considered to be too expensive. Considering these factors, ETV decided to expand to community production facilities as a means of serving the State.

ETV's primary concern appears to be that they will lose their license if local production capability is not provided. In their Plan for the 80's, ETV stated, "Local studios are needed to protect FCC licenses. ETV's legal obligation to provide local service for each local transmitter cannot be abridged without risking negative action by the FCC and inviting potential legal reaction by groups within the communities of license."

However, the Chief of the Policies and Rules Division, Broadcast Bureau of the FCC informed the Audit Council that "Normally, a television station's main studio is located in the city to which the station is licensed, thus enabling it to originate programming there. On several occasions the Commission has waived the rule in question [Section 73.613(a)] to permit noncommercial educational stations to locate the main studio elsewhere..." In FCC 78-834, Memorandum Opinion and Order, released on January 11, 1979 concerning a challenge to the license of a Georgia State Board of Education station, the Commission stated:

...We note at the outset that our rules specifically impose a local origination requirement on Commercial AM and FM stations..., respectively, while no such requirement is contained in the corresponding rules governing noncommercial stations...

...Furthermore, in judging a licensee's performance we clearly have indicated that the source of the licensee's public service programming is not as significant as the responsiveness of that programming to the needs and interests of its service area...

...Numerous state educational networks throughout the country employ the same mode of operation, reflecting the Commission's belief that a centrally programmed simultaneous broadcast schedule can serve the problems, needs and interests of the individual localities to which the stations are licensed.*
[Emphasis Added]

In June 1980 the Council contacted South Carolina's neighboring states of Georgia and North Carolina in June 1980 to determine their local production capability (see Table 7). The FCC requires that each public television licensee have a main studio. In South Carolina, there is only one public television licensee and that is the South Carolina ETV Commission which has four production studios. With the four studios and eight transmitter sites, the State provides coverage to 57% of the population.

*/The Commission is considering this matter in connection with its rule making proceeding on multiple ownership of noncommercial educational stations, and our action here is not intended to prejudice our action in that proceeding.

TABLE 7
COMPARISON OF ETV PRODUCTION FACILITIES IN
SOUTH CAROLINA, GEORGIA AND NORTH CAROLINA

	<u>South Carolina</u>	<u>Georgia</u>	<u>North Carolina</u>
Number of Production Facilities	4	3	4*
Number of Transmitter Sites (Stations)	8	10	9
Number of Licensees	1	3	2
Licensees	SCETV Commission	State Board of Education University of Georgia Atlanta Board of Education	University of North Carolina Charlotte-Mecklenburg Board of Education
Location of Production Facilities	Columbia Sumter Beaufort Rock Hill	Atlanta (2) Athens	Charlotte Chapel Hill Greensboro* Raleigh*

*In 1981 North Carolina plans to centralize its production facilities in Chapel Hill thus eliminating the use of the Greensboro and Raleigh facilities. These facilities will be utilized by the Universities for their own instructional needs.

Georgia has three licensees: the State Board of Education, the University of Georgia, and the Atlanta Board of Education. The State, as required by the FCC, has three production facilities, two of which are located in Atlanta and one in Athens. With these facilities and ten transmitter sites, Georgia provides public television to 95-98% of its population.

North Carolina has two licensees which are the University of North Carolina and the Charlotte-Mecklenburg Board of Education. There are four production facilities in North Carolina, but plans are to reduce the number of studios to two in 1981, the number required by the FCC. Approximately 90% of North Carolina's population receives public broadcasting.

Communities with regional studios could have been served without production facilities. This can be accomplished through the use of repeater transmitters. To provide this service only requires repeater transmitters in areas approved by the FCC and FAA. The three regional studios have such transmitters. Without regional studios, these structures would receive the ETV signal from the Columbia ETV Center and broadcast that signal throughout the coverage area of the transmitters. ETV provides programming to repeater transmitters in Greenville, Charleston, Barnwell and Florence.

In December 1979, a subcommittee of the ETV Commission studied the issue of regional studios. The committee concluded that commitments both in terms of funds and facilities by communities for additional regional studios had been made. The ETV Commission agreed to proceed with the development of certain regional studios because community commitments existed and recommended that funds be requested from the General Assembly. The Commission recommended no regional studio for Orangeburg.

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STATE DOCUMENTS

The Council found that based on the cost of construction of the transmitters at the existing regional studios, ETV could have provided adequate reception at an annual cost of \$607,873 versus the \$1,463,712 cost of operating the studios in 1978-79 (see Table 8).

TABLE 8
COST COMPARISON OF REGIONAL STUDIOS TO TRANSMITTERS
FOR 1978-1979 (STATE FUNDS)

Regional Studios (Present System)

<u>Item</u>	<u>Sumter</u>	<u>Beaufort</u>	<u>Rock Hill</u>	<u>Total</u>
Operating Costs	\$342,668	\$315,555	\$315,528	\$ 973,751
Depreciation:*				
Office Equipment	824	1,932	662	3,418
Technical Equipment	68,366	49,886	62,722	180,974
Debt Service	<u>106,014</u>	<u>109,932</u>	<u>89,632</u>	<u>305,569</u>
Total Cost-State Funds	<u>\$517,872</u>	<u>\$477,305</u>	<u>\$468,544</u>	<u>\$1,463,712</u>

Transmitters (Alternative System)

Operating Costs	\$135,049	\$ 96,603	\$ 70,643	\$ 302,295
Debt Service	<u>106,014</u>	<u>109,932</u>	<u>89,632</u>	<u>305,578</u>
Total Cost-State Funds	<u>\$241,063</u>	<u>\$206,535</u>	<u>\$160,275</u>	<u>\$ 607,873</u>

*Straight Line Depreciation Method.

ETV plans to open three additional regional studios in Spartanburg, Greenwood, and Conway. The estimated cost to construct the necessary towers and buildings is \$3,807,799 and bond funds have been authorized

for their construction. As of July 31, 1980, \$2,291,192 had been expended. The estimated cost to operate these three studios will be about the same as existing studios.

The Council concludes that ETV's policy concerning the need for regional studios is questionable based on an analysis of existing FCC rules and regulations and the cost of providing this additional service.

RECOMMENDATION

THE ETV COMMISSION SHOULD GIVE SERIOUS CONSIDERATION TO THE COSTS AND BENEFITS TO BE DERIVED FROM THE OPERATION OF ANY ADDITIONAL REGIONAL STUDIOS FOR WHICH COMMITMENTS HAVE NOT BEEN MADE. THE COUNCIL'S FINDINGS SHOULD BE USED TO SUPPLEMENT THE COMMISSION'S 1979 STUDY.

Viewer Information

ETV does not have adequate viewer information on viewing audiences for five of the eight ETV stations. The agency does not know how many households in the Beaufort, Barnwell-Allendale, Florence, Rock Hill and Sumter areas view ETV programs.

For ETV's other three stations, Charleston, Columbia, and Greenville, ETV subscribes to the A. C. Nielsen Company Indexes that are used to estimate viewing audiences. The Sumter, Beaufort, and Rock Hill stations, although in a Nielsen reporting area, are only partially covered because the primary viewing areas are Columbia, Savannah,

and Charlotte. This often causes them not to meet the minimum reporting standards established by the Nielsen Company. This means that the number of households viewing this station falls below the minimum number needed to be included in the report. Estimates of viewers in the Florence ETV coverage area have consistently failed to meet minimum reporting standards. The Florence area, for example, requires 0.6% (521 television households) of the total television households to view ETV for the audience to be reported by Nielsen. The Barnwell-Allendale station is covered neither by the Nielsen survey nor an ETV survey.

In using the Nielsen ratings to estimate viewing audiences, the ETV President and General Manager stated that the Nielsen ratings do not cover all the counties in the Beaufort and Rock Hill areas. Before conducting an audience survey of this area, he stated that "We have been waiting until the stations got settled down and a viewing audience established." These stations became operational in 1975 and 1978, respectively.

Effective decision-making requires that management possess sufficient and accurate information. To ensure that the resources of the State are maximized, ETV should obtain information on the viewing habits of these areas to aid the decision-making process. Nielsen ratings are used by commercial stations and networks as an indicator of the receptiveness of the viewing audience for a particular program and to determine advertising rates for their customers. This information is then used to make programming decisions such as cancellation, continuation or rescheduling.

The Council reviewed available Nielsen Station Indexes for the Charleston, Columbia and Greenville stations for the following broadcast periods: Early Fringe (Monday to Friday) - 4:30 p.m. to 7:30 p.m., and Prime - 8:00 p.m. to 11:00 p.m. daily. Table 9 indicates the percentage viewing share for the three ETV stations for rated months in 1979 and 1980. A comparison of viewing shares for commercial and ETV stations are shown in Appendix B.

TABLE 9
PERCENT HOUSEHOLDS (HH) VIEWING ETV IN DESIGNATED MARKET
AREAS BY MONTH, DAYS AND TIME

Month	Percent Households Viewing ETV								
	Monday-Friday						Saturday-Sunday		
	4:30 - 7:30			8:00 - 11:00			8:00 - 11:00		
	Chas.	Cola.	G'ville	Chas.	Cola.	G'ville	Chas.	Cola.	G'ville
May 80	2	2	<1	3	2	1	4	2	1
Feb. 80	2	1	<1	2	2	1	2	2	1
Nov. 79	2	N/A	<1	3	N/A	<1	2	N/A	<1
July 79	N/A	N/A	<1	N/A	N/A	1	N/A	N/A	1
May 79	1	1	N/R	3	3	N/R	3	3	N/R
Feb. 79	N/A	2	N/R	N/A	1	N/R	N/A	1	N/R
Average Reported	1.75	1.50	<1	2.75	2	<1	2.75	2	<1

Source: A. C. Nielsen Station Index - Viewer in Profile.

N/R - Did not meet minimum reporting standards in any time period during survey.

N/A - Index not available from ETV.

The average reported viewing audience for the ETV stations ranged from 2.75% to less than 1%. For these months the highest audience share of 4% was achieved by the Charleston ETV station during the 8:00 p.m. to 11:00 p.m. time period for four weeks in May 1980. This figure means that of those households (86,520) using television, 4% of the sets, or 3,461 were tuned to the Charleston ETV station while the remaining households were tuned to the commercial stations in the area. Average viewing shares for commercial stations during the same period ranged from 53% to less than 1%. The highest audience share achieved by a commercial station was 57% during the 4:30 p.m. to 7:30 p.m. time period in May 1979. This means that of those households (73,393) using television, 57% of the sets, or 41,834 were tuned to this commercial station.

ETV is expending resources based on incomplete information about its viewing audience. ETV does not know how many people in the Beaufort, Rock Hill, Barnwell-Allendale, Florence and Sumter ETV coverage areas view their programs. Consequently, ETV cannot adequately assess the impact of its programming actions on the citizens of the State. Neither can ETV determine if the expenditure of State funds is justified for a given area. ETV does not know if it is operating in a cost-effective manner.

RECOMMENDATION

ETV SHOULD COMMISSION A SURVEY OF THE VIEWING AUDIENCES IN THOSE AREAS OF THE STATE NOT CURRENTLY COVERED BY EXISTING SURVEYS. AREAS THAT ARE COVERED BY

NIELSEN BUT DO NOT MEET ESTABLISHED
REPORTING STANDARDS SHOULD ALSO BE
INCLUDED IN THIS PROCESS.

Tape and Delay Centers

Tape and delay centers are costly investments that have had little effect on increasing the utilization of ITV resources in secondary schools. The Audit Council compared all 118 secondary schools served by 12 State-owned tape and delay centers and closed circuit channels with all 107 secondary schools using ITV programs only through closed circuit channels in school year 1978-79. The 118 schools have the same system as the 107, plus service by tape and delay centers. The Audit Council found little increase in ITV usage in schools served with tape and delay centers.

Tape and delay centers are facilities that serve an individual school district's scheduling needs by playing ITV programs over closed circuit channels for teachers as requested, or by taping ITV programs and sending the video tapes to teachers for use when convenient. Furthermore, tape and delay centers offer the conveniences of scheduling programs to fit classroom schedules and local curricula needs. Closed circuit channels alone do not provide this scheduling flexibility.

When the two systems were compared, the Council found that the schools with tape and delay centers had 64.9% of their students viewing ITV, while schools without the centers had 60%. If the schools with tape and delay centers had not had them, and the percentage of students viewing was the same as other schools, then only 5,327 more students could be attributed to the addition of the tape and delay centers. This

was determined by multiplying 109,650 students by 60% of students viewing which would give 65,790 students viewing ITV without tape and delay services. This compared to the 71,117 (64.9%) who viewed ITV, indicates that only 5,327 more students are viewing because of tape and delay flexibility (see Table 10). Also, because insufficient data is collected by the Office of ITV and Radio, all that is known is that these 5,327 students viewed ITV at least once in the school year while the extent of usage is unknown (see p. 44).

TABLE 10
COMPARISON OF ITV UTILIZATION BY SCHOOLS SERVED WITH TAPE
AND DELAY CENTERS AND SCHOOLS SERVED BY CLOSED
CIRCUIT CHANNELS FOR SCHOOL YEAR 1978-79

<u>Type School</u>	<u>Number</u>		<u>Percent Students in Schools Viewing ITV at Least Once</u>
	<u>Schools Served</u>	<u>Students in Schools Viewing ITV*</u>	
Tape and Delay	118	109,650	64.9%
Closed Circuit	107	84,532	60.0%

*Students are counted if they viewed ITV at least once during the school year.

Source: Office of ITV and Radio, 1978-79 Utilization Printout.

Since the purpose of tape and delay capability is to provide more convenience and flexibility in broadcasting, schools provided with this service should utilize ITV more than schools with only closed circuit channels. Tape and delay centers should alleviate scheduling problems and contribute to significantly higher usage of ITV resources.

The Audit Council examined North Carolina and Georgia's system of broadcasting ITV programs to schools and learned neither state uses tape and delay centers or closed circuit channels. Both states broadcast programs over open circuit channels or tape programs from the ETV center and send the tapes to schools.

The cost to operate 12 tape and delay centers is \$272,595 annually for maintenance, equipment replacement, and telephone closed circuit costs (incurred only by tape and delay centers) to increase utilization by only 5,327 students in 118 schools. Thus, the average cost for each additional student served by tape and delay centers is \$51.17 and ITV does not know how much the students view the ITV programs. This expenditure brings into question the cost-effectiveness of the tape and delay centers.

ETV officials anticipated a significant increase in ITV utilization as a result of installing tape and delay centers. However, tape and delay centers have not significantly increased the utilization of ITV programs as expected.

RECOMMENDATION

THE GENERAL ASSEMBLY SHOULD CONSIDER DIS-
CONTINUING THE FUNDING OF TAPE AND DELAY
CENTERS AND THE LEASING OF LOCAL CLOSED
CIRCUIT CHANNELS FOR TAPE AND DELAY
CENTERS.

Mobile Units

ETV's need for three mobile units with remote production capacity is questionable. With the three units, the Commission produced an

average of only 11 productions per year for the past four years (FY 75-76 to FY 78-79). Each production took about three days to complete and resulted in a 57-minute program. One vehicle, costing \$100,000 and containing \$518,542 worth of equipment, and two other vehicles, costing \$24,000 each, are used infrequently, or not at all to perform remote production activities.

The Audit Council reviewed in detail the usage of mobile units for the most recent year (FY 78-79). For that year ETV produced 25 programs, 23 of which were produced with the same mobile unit. This unit is larger than the other two, has permanently installed equipment, and is assigned to Columbia. To produce the 23 programs required vehicle usage of 45 days during the year. During the remainder of the year, this vehicle was used in production activities at the ETV center or was idle. The mobile unit assigned to the Sumter regional studio was used only 20 days in 1978-79, 18 of which were in conjunction with the larger unit for the Spoleto Festival. The Beaufort unit was not used for remote production in 1978-79. Consequently, of 747 total days available for production activities by the three remote vehicles during FY 78-79, they were used only 65 days, or 9% of the time.

Another indicator of the extent of mobile unit usage is mileage. In 1978-79, the large mobile unit logged 975 miles, while the Sumter and Beaufort units recorded 2,783 and 1,250 miles, respectively. Since there was no record of the Beaufort mobile unit producing any programs and 1,250 miles were logged, the Council inquired for what purpose the vehicle was used in 1978-79. The station manager stated that the mobile unit had been used in a local parade, traveled to Columbia a couple of times for maintenance, and may have been used once at the Spoleto Festival.

At the time these vehicles were acquired, remote production activities involved the use of large cumbersome cameras. The size of these cameras required vehicles of sufficient size to transport such equipment. In 1978, ETV acquired portable cameras which, although not permanently assigned to any one of the units, were used by each production facility because of their compact size. As a result, the type and size of the vehicle needed to transport this equipment changed from large or medium to the smaller, less expensive step vans. For example, any remote production activities conducted by the Sumter studio are currently performed by using a step van.

The Council inquired into possible future replacement of existing vehicles by ETV. The Deputy Manager of ETV stated that if replacement became necessary, these vehicles would be replaced with smaller vehicles that fit the changing state of the arts of television equipment. However, ETV's Plan for the 80's shows their plan to request \$80,000 for the "replacement of two mobile TV vehicles, 8 years old" in FY 81-82. The Council notes that during FY 81-82 Budget and Control Board hearings on budget increases, ETV requested \$3,903,000 for equipment replacement including \$80,000 for replacement of these vehicles. This indicates that ETV intends to purchase replacement vehicles of comparable size and cost.

ETV acquired the self-contained vehicle in 1971 to perform color production activities throughout the State. Vehicles acquired in 1975 were to be used as television remote mobile units at Beaufort and Sumter regional studios. Effective management of the acquisition and use of mobile vans is vital if ETV is to operate in the most efficient and effective manner. The appropriate size, type and number of vehicles suited to

the functional requirements of the job should be purchased if the State is to derive the maximum benefit.

The Council contacted South Carolina's neighboring states, Georgia and North Carolina, to determine the types of mobile units they use. Mobile vehicles used for production activities in Georgia include a concert bus that serves as a control room and a small step van. Each unit carries cameras, three on the bus and two on the small van. In North Carolina, remote production is conducted by one fully-equipped unit and a smaller unit equipped with a microwave dish for live broadcast. North Carolina also uses station wagons to transport equipment and personnel for remote productions.

ETV is maintaining three vehicles capable of remote production when the majority of these activities are performed by only one vehicle. As a result the State is not receiving optimum benefit from their vehicles in terms of the percentage of time production activities are conducted. As vehicle requirements change, action should be taken to evaluate the continuing use of the present fleet. Potential revenue for ETV or the State is lost, in terms of resale or salvage value, as long as production activities remain at the current level.

RECOMMENDATIONS

ETV SHOULD EVALUATE REMOTE PRODUCTION
VEHICLE REQUIREMENTS TO DETERMINE THE
PROPER NUMBER OF VEHICLES THAT WOULD MEET
EXISTING PRODUCTION REQUIREMENTS.

IF IT IS DETERMINED THAT A LESSER NUMBER OF VEHICLES ARE NEEDED, OR SOME CURRENT AGENCY VEHICLES ARE SUITABLE TO PERFORM PRODUCTION ACTIVITIES, THOSE VEHICLES NOW PERFORMING THESE ACTIVITIES SHOULD BE DISPOSED OF IN A MANNER BENEFICIAL TO THE STATE.

ETV Guide

Since 1968, ETV has provided free copies of the South Carolina SCENE magazine to schools, State Government, and to individuals requesting subscriptions. The magazine, or ETV Guide, cost \$192,050 for 1979-80, and \$131,080 of this is attributed to individual subscribers who pay nothing but are subsidized by South Carolina taxpayers. Any individual can obtain a free subscription to the ETV Guide by either contributing to the ETV Endowment or submitting a written request to ETV.

In 1968, there was no resource available to the viewing public that listed program schedules for instructional and Public Broadcasting programs. Consequently, ETV developed a guide of scheduled ETV programs. However, now all the major newspapers throughout the State, as well as the TV Guide, carry the daily program listings for ETV. The ETV Guide merely provides more detailed information on selected ETV programs and provides instructional radio schedules.

The number of ETV Guide mailings each month by category varies due to the constant additions and deletions of names (see Table 11). According to figures supplied to the Council by ETV, the number of

annual mailings of the ETV Guide for FY 79-80 was 635,994 while the number of copies printed were 671,000. Consequently, 35,006 copies were printed but were not mailed to recipients at a cost of \$7,561.

TABLE 11
ETV GUIDE MAILING CATEGORIES
FY 1979-80

<u>Recipient</u>	<u>Number of Copies Mailed Annually*</u>
1. School Bulk	139,000
2. Miscellaneous Bulk	26,000
3. Superintendents	1,500
4. Director of Instruction	5,500
5. State Department	600
6. School Board Chairman	700
7. Public TV Stations	400
8. ITV Consultants	100
9. State Government	1,200
10. Legislators	2,100
11. Higher Education	1,700
12. SECA Board	600
13. ETV Endowment Members	39,000
14. Schools	5,600
15. In-State Subscribers	390,000
16. Out-of-State Subscribers	<u>23,000</u>
TOTAL ANNUAL MAILINGS	637,000

*Figures for each category are approximations due to monthly changes in the mailing list. The total number actually mailed was 635,944.

The majority of the mailing list for the ETV Guide consisted of in-state subscribers (390,000 copies annually), ETV Endowment members (39,000 copies annually), and out-of-state subscribers (23,000 copies annually). The total number of ETV Guides mailed for these three categories in FY 79-80 was 452,000 at a cost of \$131,080 (452,000 copies x 29¢ each). This is 68% of the ETV Guide's total annual cost of \$192,050 (see Table 12).

TABLE 12
ANNUAL COSTS OF ETV GUIDE
FY 1979-80

I. Printed Copies

<u>Item</u>	<u>Annual Cost</u>
A. Public Information (Writing, Editing, Typesetting)	
1. Personnel	\$13,546.08
2. Equipment	3,644.99
3. Supplies	250.00
	<u>\$17,441.07</u>
B. Graphics (Design of Cover/Paste Up of Copy)	
1. Personnel	\$ 576.16
2. Supplies	100.00
	<u>\$ 676.16</u>
C. Printing	
1. Personnel	\$17,982.65
2. Materials	68,350.17
3. Equipment	40,543.57
	<u>\$126,876.39</u>
Total Cost of 671,000 Printed Copies	\$144,993.62
Average Cost Per Copy (\$144,994 ÷ 671,000)	21.6¢

II. Mailing Costs

<u>Item</u>	<u>Annual Cost</u>
A. Subscription Maintenance	
1. Personnel	\$ 8,485.00
2. Equipment	9,688.20
3. Supplies	300.00
	<u>\$18,473.20</u>

B. Mailing

1. Personnel	\$ 8,691.28
2. Equipment	3,742.00
3. Postage	15,899.85
4. Supplies	250.00
	<u>\$28,583.13</u>
Total Mailing Costs of 635,994 Copies	\$47,056.33
Average Mailing Cost Per Copy (\$47,056 ÷ 635,994)	7.4¢
TOTAL ANNUAL COST	<u>\$192,049.95</u>

Government provides two basic types of goods and services. One is referred to as "public goods" which is described as a good that cannot be provided to one citizen without also being supplied to his neighbors. An example of this would be national defense. The special properties of public goods make it difficult for private firms to produce and sell them at a profit. If they are provided to one citizen, their benefits are shared by all, so the problem arises of how to get would-be "free riders" to pay their share of costs. The government solves this free-rider problem by employing its power to tax.

In addition to public goods, the government also supplies a number of so-called "merit-goods." These include such things as police protection, and some kinds of medical services that are distributed free of charge on the ground that each citizen, as a matter of human right merits his or her fair share.

Goods or services other than public or merit ones should be supplied by the private sector, or if provided by the Government, the users should pay the cost since they receive the benefits. The ETV Guide is neither a public nor merit good. Since users of the ETV Guide can be identified, and the cost of providing the magazine to them

can be determined, then those subscribers should pay for it. Mailings to schools and State agencies and officials should be continued.

The Council examined the concept of requiring individual subscribers to pay an annual fee to receive a monthly copy of the ETV Guide. This would mean that approximately 452,000 copies per year would not be provided free. Current cost figures for the ETV Guide were considered and ETV personnel were contacted to determine the effect on costs if the number of mailings were reduced as a result of the annual charge. ETV stated that the current cost per copy for the ETV Guide would remain constant, because they felt that a lot of people would want to continue their subscriptions.

Requiring the ETV Endowment members, in-state and out-of-state recipients to pay for a subscription to the ETV Guide would result in an annual savings of at least \$131,080 in State appropriated funds (452,000 copies x 29¢ each). ETV could possibly realize additional savings in this area by publishing a less elaborate program guide.

RECOMMENDATIONS

ETV SHOULD CHARGE AN ANNUAL SUBSCRIPTION
FEE FOR THE ETV GUIDE PROVIDED TO ETV
ENDOWMENT MEMBERS, IN-STATE SUBSCRIBERS
AND OUT-OF-STATE SUBSCRIBERS TO COVER
THE COST OF PROVIDING THE ETV GUIDE.
STATE FUNDS FOR ETV SHOULD BE REDUCED BY
THE AMOUNT OF SAVINGS REALIZED.

IF ETV DESIRES TO CONTINUE FREE SUBSCRIPTIONS OF THE ETV GUIDE TO ETV ENDOWMENT MEMBERS, THE ETV ENDOWMENT SHOULD REIMBURSE ETV FOR THE ANNUAL SUBSCRIPTION FEE FOR ITS MEMBERS.

Closed Circuit System

Introduction

Since 1959, the South Carolina Educational Television Commission has leased telephone land lines for the purpose of transmitting closed circuit instructional programming to the public schools in South Carolina. The closed circuit network offers a multi-channel capacity designed to allow scheduling flexibility for the various school systems in South Carolina.

The cost for leasing the telephone lines is \$3.3 million annually in State appropriated funds. As a result of the increase in expenditures, the Commission has been forced to study alternatives for the transmission of instructional programming. Methods being considered are satellite, microwave, fiber cable, and tape duplication. The report is due to be completed by December 1, 1980.

The Council's analysis of ETV's closed circuit system revealed that (1) ETV does not have a written policy for terminating closed circuit services to schools reporting minimal utilization; (2) ETV does not have a written contract with the public utility from which it is leasing the telephone land lines; and (3) an ETV tape duplication project involving 16 schools has shown to be a cost effective alternative to the leasing of closed circuit land lines for providing instructional programming. These areas are discussed further in the following paragraphs.

Need to Terminate Closed Circuit Services to Some Schools

The South Carolina Educational Television Commission has not terminated closed circuit services to 11 schools reporting no usage of instructional television in FY 78-79. Additionally, the South Carolina Educational Television Commission has not developed a written policy and guidelines for terminating closed circuit to schools showing minimal utilization.

The Council examined the FY 78-79 utilization data compiled by the ITV staff and requested the annual closed circuit charges for each school. It was found that 11 schools reported no usage of instructional television for the year. The annual cost to the State for closed circuit services to these 11 schools was \$45,235. In addition, 18 schools reported a student "enrollment" of 1-25% in ITV courses at an annual cost to the State of \$98,429.

The Council found that no written policy existed at ETV outlining criteria for termination of closed circuit services to public schools. Since FY 74-75 to FY 79-80, ETV has reviewed 159 schools for termination; however, only 14, or 9% have been terminated for reasons of low usage. One school was reviewed by an ETV maintenance technician and the following was reported in an ETV memo dated April 5, 1975:

During our maintenance visits to this school during the past two years, we have observed very little, if any utilization. [Emphasis Added]

According to ETV, the cost to the State of providing closed circuit services to this school since 1975 was \$14,662 per year. If appropriate action had been taken, the State could have saved \$73,310 from 1975-80. The principal of the school, in an interview on February 13, 1980, stated that the school had stopped using ITV 12-14 years earlier.

Closed circuit services to this school and three others were not terminated by ETV until the Council began inquiring as to why the schools had continued to receive closed circuit services when the schools did not use ITV.

Need for a Written Contract for Closed Circuit Line Charges

The South Carolina Educational Television Commission expends \$3.3 million annually in State appropriated funds to lease closed circuit services from a public utility for public schools without a written contract.

ETV contends that the absence of a binding contract affords the State flexibility in the termination and installation of closed circuit services. This situation allows ETV to avoid a ten-year liability contract that is required of private entities when applying for closed circuit services.

Private hospitals, police departments, private schools and institutions of higher education, including technical schools and universities are required to sign a ten-year liability contract with the public utility supplying the services. The ten-year liability contract establishes a basic termination charge that is payable over a 120-month period after which the services can be terminated without charge to the receiving agency. This contract allows the public utility to receive payment for its investment in case of a termination request by the subscriber prior to the 120-month period. The contract in part states:

If this contract is cancelled by the subscriber prior to establishment of service, the subscriber agrees to pay the cost incurred by the telephone company in engineering, ordering and providing the equipment and disposing of it, less credit obtained through disposal; the charge in this event will not exceed the basic termination charge.

Sound management practices dictate the need for a binding contract when procuring services from an outside source. Items such as base charge, termination policies, installation charges, and rights and obligations of each party should be considered. ETV could negotiate with the utility as to permitting a certain number of terminations each year without charge. ETV's current arrangement with the public utility does not address any of these areas.

The lack of a binding contract has discouraged ETV to thoroughly review the need for adding new closed circuit lines. Additionally, ETV has been reluctant to terminate closed circuit services to schools showing minimal utilization for fear of being required to enter a ten-year liability contract. If a dispute between the State and the public utility regarding closed circuit line charges should arise, the State would not be able to adequately defend its position due to the absence of a legal contract.

Video Tape Duplication

Due to increasing cost to the State for leasing closed circuit land lines from public utilities, in FY 78-79, ETV provided 16 schools with video tape recorders, television sets, and video tapes for instructional programs as an alternative to closed circuit.

ETV provided the Council with cost and usage data on the operation of the tape duplication program. The data revealed an annualized cost of the tape duplication program for the 16 schools of \$42,760. The annualized cost for providing closed circuit to these 16 schools would have been \$193,378 (see Table 13), thus, an annual savings to the State of \$150,618.

TABLE 13
ALTERNATIVES OF PROVIDING ITV TO PUBLIC SCHOOLS THROUGH
TAPE DUPLICATION OR CLOSED CIRCUIT FOR 1979-80 SCHOOL YEAR

<u>School</u>	<u>Tape Duplication</u>			<u>Closed Circuit³</u>
	<u>Equipment¹</u>	<u>Tape Duplication²</u>	<u>Total</u>	
Belton-Honea Path High	\$ 1,200	\$ 1,585	\$ 2,785	\$ 10,825
Belton Middle	600	1,585	2,185	19,167
Honea Path Middle	600	1,585	2,185	8,740
South Jr. High	1,200	1,585	2,785	4,568
Newberry High	1,200	1,585	2,785	6,654
Holly Hill High	1,200	1,585	2,785	6,654
Roberts High	1,200	1,585	2,785	21,774
R. C. Edwards Jr. High	600	1,585	2,185	8,218
Broome High	1,200	1,585	2,785	8,218
Cowpens Jr. High	1,200	1,585	2,785	7,697
Pacolet Jr. High	1,200	1,585	2,785	16,560
Furman High	1,200	1,585	2,785	14,696
Hillcrest High	1,200	1,585	2,785	10,004
Maywood High	1,200	1,585	2,785	18,867
Ebenezer Jr. High	1,200	1,585	2,785	11,868
Work Comprehensive High	<u>1,200</u>	<u>1,585</u>	<u>2,785</u>	<u>18,868</u>
TOTAL	\$17,400	\$25,360	\$42,760	\$193,378

- ¹Annualized equipment cost based on total purchase price with a 3-year life.
²Annualized tape duplication cost based on an average of 100 hours of tape x \$15.85 per hour cost.
³Annual cost if school was provided closed circuit land line service.

Source: South Carolina Educational Television Commission.

The Georgia State Board of Education has been engaged in a tape duplication project for providing instructional programming since 1975. The study ordered by the Georgia State Board of Education of Georgia's instructional television listed two major problems:

Problem: Can we add flexibility to the scheduling and content of instructional television?

Problem: Can we develop a system of planning and delivering ITV based upon local participation and responses to regional differences?

As a result, 19 school systems in the WVAN-TV, Savannah-Pembroke coverage area participated in a Regional Instructional Television tape duplication project. The project was designed to investigate ways of involving local teachers, central staff and community representatives in making decisions related to the selection and scheduling of instructional television programs.

The following conclusions were drawn in the process of studying the achievement in the Regional Project:

- (1) ITV utilization is increasing from "somewhat" to "a great deal," depending on system involvement in the project as well as building principal involvement, media specialist interest, and availability of equipment. [Emphasis Added].
- (2) Cooperative planning between the local systems and the Instructional Resources Unit for education innovation is beginning to effectively involve teachers and media specialists as well as education administrators. [Emphasis Added]
- (3) Increased opportunity for local participation in the selection of materials is leading to more effective use of media and more useful instructional materials service from the State of Georgia for its citizens. [Emphasis Added]

In reference to the future of the project the report stated:

Sixteen principals (60 percent) reported that their school's involvement in ITV has increased "some" or "considerably" since their school systems have

become associated with the project. Twenty of the media specialists (80 percent) reported that their school's involvement in ITV has increased "some" or "considerably"... [Emphasis Added]

Principals and media specialists also agreed almost unanimously that "the current method of planning and management of the selection and scheduling of instructional television should continue and that the Regional Instructional Television Project should be expanded to other districts in the State." [Emphasis Added]

Conclusion

The Council's research in the closed circuit system reveals that ETV lacks established termination policies defining minimal utilization, and a written contract with the public utilities for the leasing of closed circuit land lines. These deficiencies have minimized ETV's effectiveness in assuring the efficient expenditure of State appropriated funds. Therefore, it is important that the current study of alternatives for transmitting instructional programming to the public schools by the ETV staff be completed as soon as possible.

RECOMMENDATIONS

ETV SHOULD TERMINATE THOSE SCHOOLS SHOWING NO UTILIZATION OF CLOSED CIRCUIT SERVICES. STATE FUNDS FOR ETV SHOULD BE REDUCED BY THE AMOUNT OF SAVINGS REALIZED.

ETV SHOULD NEGOTIATE A CONTRACT WITH PUBLIC UTILITIES FOR THE EXPENDITURE OF STATE APPROPRIATED FUNDS FOR CLOSED CIRCUIT SERVICES TO PUBLIC SCHOOLS.

ETV SHOULD DEVELOP WRITTEN PROCEDURES
AND GUIDELINES FOR TERMINATION OF SCHOOLS
SHOWING MINIMAL UTILIZATION.

BASED ON THE COST SAVINGS AFFORDED BY
VIDEO TAPE DUPLICATION AS COMPARED TO THE
CLOSED CIRCUIT SYSTEM, ETV SHOULD GIVE
CAREFUL CONSIDERATION TO THIS ALTERNATIVE
IN DECISIONS TO EXPAND ITV CAPABILITY TO
ADDITIONAL SCHOOLS.

CHAPTER III

ETV PROCEDURES

Introduction

During this audit the Legislative Audit Council identified various problems related to the policies and procedures of the ETV Commission. Several of the weaknesses noted also indicate a need for improved statewide policies or regulations. Additionally, instances are noted in this chapter where the ETV Commission has not complied with State regulations or the Commission's internal operating procedures.

Overall, the Council concludes that the ETV Commission has not fulfilled its managerial role through the development of complete and appropriate internal operating procedures. ETV does not have a Policies and Procedures Manual addressing overall operations, administration and management procedures of the agency. ETV's management, supervisors and employees are without a manual to guide them in the performance of their duties.

The ETV Personnel Director stated that new employees receive copies of previous memos addressing agency policies pertaining to moonlighting, State grievance procedures, holidays and several other areas. However, they are not informed of other aspects of ETV such as the goals and objectives, administration, management and responsibilities of the agency.

Also, ETV conducts business with various State agencies and non-profit organizations. Yet, there are no written policies and procedures stating the type of services ETV will provide or rate of compensation for these services. As a result, State agencies conducting business with ETV are subject to inequities in services and costs.

Although there are no State requirements for a Policies and Procedures Manual, such manuals for the administration and control of agency activities are generally accepted as good management practices. Policies and procedures are needed to ensure an adequate degree of "checks and balances" over the complex operations of agencies. With formal procedures, management safeguards its assets and protects its employees from possible temptation and from making errors. The lack of written policies and procedures hampers management efficiency and effectiveness because it is difficult to hold employees accountable for verbal or non-existent guidelines. Unwritten procedures can easily be misinterpreted and erroneously communicated.

MAJOR RECOMMENDATION

ETV SHOULD DEVELOP A POLICIES AND PROCEDURES MANUAL ADDRESSING OVERALL ETV OPERATIONS, ADMINISTRATION AND MANAGEMENT PROCEDURES OF THE AGENCY. SPECIAL ATTENTION SHOULD BE GIVEN TO THE PROCEDURAL PROBLEMS NOTED IN THIS CHAPTER.

Expenditure of State Appropriations

ETV did not follow legislative intent in the expenditure of State funds appropriated for an anticipated rate increase for closed circuit lines. In FY 77-78, ETV spent \$198,710 on the operation and expansion of the closed circuit network when an anticipated rate increase for closed circuit lines was denied by the Public Service Commission (PSC). The expenditure of funds on the closed circuit network necessitated the

continuance of the \$198,710 increase in the next fiscal year and has resulted in a cost to the State of \$794,840 from FY 77-78 to FY 80-81.

In July 1976 Southern Bell requested from the PSC a 15% general rate increase on all services including closed circuit service. Specifically, Southern Bell requested a \$375,000 annual increase for closed circuit lines. ETV notified the Budget and Control Board of the anticipated rate increase before the Board submitted its budget recommendations to the General Assembly. The Board shifted \$198,710 from other areas within ETV's recommended budget to cover the anticipated rate increase. The General Assembly appropriated an 8% increase in closed circuit charges for the anticipated rate increase, as recommended by the Budget and Control Board.

The President and General Manager of ETV requested that closed circuit funds appropriated for the proposed Southern Bell rate increase, which had not materialized, be used to implement reallocation of pay grades (pay increases).

The Budget and Control Board addressed the request at its meeting on March 23, 1978:

... the Budget and Control Board agreed to revise its Supplemental Appropriation recommendations so as to include the funding required to implement during the current fiscal year the grade reallocations previously approved for ETV by the State Personnel Division provided that the funds reserved by the ETV Commission to pay for a closed circuit rate increase shall lapse to the General Fund. [Emphasis Added]

Since Southern Bell did not increase the rates for closed circuit lines in FY 77-78 and the Budget and Control Board recommended that the funds for the rate increase lapse to the General Fund, ETV should have returned \$198,710 to the General Fund.

The Audit Council questioned ETV personnel as to why these funds were expended for purposes other than the 8% increase. They stated that the funds were spent on "Closed Circuit Charges" as line-itemed in the Appropriation Act, therefore, ETV was in compliance with the Act. However, ETV should not have interpreted an increase in closed circuit charges as authorization to expand the closed circuit system or expend funds for purposes other than a rate increase on closed circuit charges when the rate increase was denied by the PSC.

RECOMMENDATIONS

ETV SHOULD EXPEND STATE FUNDS ONLY FOR PURPOSES INTENDED BY THE LEGISLATURE AND IN ACCORDANCE WITH THE DIRECTIVES OF THE STATE BUDGET AND CONTROL BOARD.

FOR ITEMS OF CONSIDERABLE COST AND UNCERTAINTY THE LEGISLATURE SHOULD CONSIDER INCLUDING PROVISOS IN THE APPROPRIATIONS ACT TO ENSURE THAT ETV SPENDS THE APPROPRIATED FUNDS FOR THE INTENDED PURPOSES AND LAPSE ANY FUNDS NOT NEEDED FOR THE ANTICIPATED PURPOSE.

Inventory Management

Introduction

ETV maintains a property inventory valued at \$18.8 million. The Audit Council examined ETV's property and inventory control procedures

for maintaining accountability for its inventory. During its review, the Council examined the State Auditor's report on ETV's fixed assets conducted in December 1979. The Audit consisted in part of a sample review of 311 items obtained from ETV's inventory and an attempt to locate these items. Although the State Auditor's Office could not locate 30 items from the sample selected, it concluded that ETV's inventory is materially correct. The Audit Council reviewed the items which the Auditor's Office could not locate. Although six items valued at \$778 were still reported missing and could not be found, the missing items had been adequately investigated by ETV. The Council concluded from its review that ETV made a thorough attempt to locate all items not found by the State Auditor's Office in December 1979.

In addition to the accountability of TV sets discussed in Chapter II, during its review of ETV's property management system the Council found four problems which should be corrected.

(1) Need for Detailed Equipment Justification

ETV has not provided adequate descriptions and details of equipment items to be purchased in its budget requests to the Budget and Control Board. In its annual budget requests to the Budget and Control Board, for three fiscal years from FY 76-77 through FY 78-79, ETV requested a total of \$2,309,006 and was appropriated \$1,684,432, including supplemental appropriations, for equipment.

The Audit Council attempted to determine what equipment items ETV was to purchase with its equipment appropriation and if they purchased these items for the three fiscal years from FY 76-77

to FY 78-79. However, except for a list which accompanied a requested supplemental appropriation in FY 78-79, no detailed schedules of equipment to be purchased were submitted with the budget requests to the Budget and Control Board for these years as justification for the requests. ETV submitted to the Budget and Control Board only equipment inventory lists showing the present age and replacement cost of its equipment as justification for general appropriations requests for FY 76-77 to FY 78-79. Although one equipment inventory listing showed those items with replacement past due, the total replacement value of the items needing replacement did not agree with the amount requested for equipment. Consequently, the specific equipment items for which ETV requested funds could not be determined.

Lists of equipment items to be purchased were sporadically sent to the House Ways and Means Committee and the Senate Finance Committee during the Budget process for FY 76-77 to FY 78-79. However, these lists of equipment need to be submitted to the Budget and Control Board to be reviewed by the budget analysts for need.

The General Appropriation Acts, Section 1A of 1976-77 to 1978-79 direct each State agency to justify the entire amount of money it is requesting. A budget process in which a State agency does not detail and justify its requests for funds does not assure that scarce resources are allocated in order to derive maximum benefit to the public.

(2) Need to Dispose of Unused Equipment

ETV has on inventory 131 items of equipment, with an original value over \$77,000, which are described as unused and have not been disposed of. This equipment has been classified as unused for over one year. There is no evidence that ETV has attempted to dispose of these unused items of equipment.

The Audit Council examined a list of 152 items of equipment from ETV's inventory which are described as unused. Twenty-one (21) of these items, in usable condition, were being used or were being retained for emergency situations. The Council found that 131 items of equipment with an original value of \$77,288 were not being used at any time by an ETV facility. However, the Audit Council could not determine whether all items classified as unused should be disposed of.

Sound management practices require that equipment which is not used, surplus, or obsolete be disposed of, so as not to clutter offices and storage areas with outdated equipment. ETV has the authority in Section 59-7-50 of the 1976 Code of Laws of South Carolina to sell equipment and use the funds received for purposes of ETV. ETV could also dispose of unused or surplus property through the Division of General Services as provided for in State Regulations.

Equipment which is retained and not used loses sale or salvage value the longer it is kept. ETV could sell this property and retain the funds for the agency to purchase needed equipment, or return the funds to the State's General Fund.

ETV officials stated that the lack of personnel to administer the disposal of unused and surplus property has limited the agency's ability to do so. On May 21, 1980 State Personnel approved three new positions to assist in support services which include equipment disposal. ETV expressed the intention to the Council to dispose of all unused, surplus or obsolete items of equipment.

(3) Inadequate Controls Over Video Tapes

ETV did not provide adequate controls over more than \$70,000 worth of video tapes used for instructional programming for schools in FY 79-80. Adequate records were not kept of the number of video tapes transferred to schools throughout the State and tapes were stored in boxes in an unlocked room at ETV's Division of Field Technical Services. From May 1979 through June 1980, ETV purchased a total of 5,235 video tapes for use in instructional television at a cost of \$71,241. Of these tapes, 4,341 were 1/2 inch tapes of the same type used in home video tape recorders and were purchased for \$55,164. In addition, \$27,196 worth of tapes were ordered in July and August 1980 and more tape purchases are planned.

ETV purchases and provides video tape recorders and video tapes to schools for instructional programming. During FY 79-80, when video tapes were sent to schools, ETV recorded the number of hours of tape required for requested programs, but did not record the number of tapes sent to schools. When a school finished using a taped program, the tape would often be returned to ETV for use in recording other requested programs. The school and ETV have a record of the number of tapes being returned to ETV

on a taping request summary form but not the number of tapes sent to schools. Thus, there was little accountability of the number of video tapes that should be in the ETV inventory. Since the Audit Council reviewed controls over video tapes, ETV has developed procedures to account for tapes received and shipped to schools. ETV has also moved the video tapes to a room which is locked when tapes are not being duplicated.

(4) Need to Account for Equipment Used as Stage Props

ETV does not account for durable items of equipment purchased for use as stage props. ETV has purchased items of furniture for use on stage sets and has not assigned property control numbers to them or included the items on the agency's property inventory listing. A centralized listing of these items does not exist and no individual is held accountable for the equipment.

The Audit Council identified a total of 39 pieces of furniture used as stage props which had not been accounted for on the agency's inventory listing. The value of these items is approximately \$2,400.

Section 10-1-140 of the 1976 Code addresses responsibility for personal property of State agencies:

The head of each department, agency or institution of this State... shall be responsible for all personal property under his supervision and each fiscal year shall make an inventory of all such property under his supervision, except expendables. [Emphasis Added]

ETV has interpreted the Comptroller General's disbursement code for purchasing stage props as the reason for not including items purchased from these funds on its agency inventory, since

the code falls under the general category of supplies and materials, which are not inventoried by ETV.

ETV has misunderstood the intent of the Comptroller General's disbursement code. By purchasing stage properties, including furniture, from a supplies and materials disbursement code, ETV has interpreted the use of this disbursement code as inferring that all items purchased under the code are supplies and need not be accounted for on the agency's inventory.

RECOMMENDATION

ETV SHOULD SUBMIT FULL JUSTIFICATIONS TO THE BUDGET AND CONTROL BOARD FOR FUNDS REQUESTED, INCLUDING A SCHEDULE OF EQUIPMENT TO BE PURCHASED OR REPLACED WITH REQUESTED FUNDS, SO REQUESTS CAN BE EXAMINED BY BUDGET ANALYSTS TO DETERMINE.

ETV SHOULD MAKE A DETERMINED EFFORT TO SELL AND/OR DISPOSE OF SURPLUS PROPERTY.

ETV SHOULD CAREFULLY EXAMINE ALL ITEMS CLASSIFIED AS NEVER USED ON ITS INVENTORY AND MAKE NECESSARY CHANGES TO ACCURATELY REFLECT THE RATE OF USE, CONDITION AND STATUS OF ALL ITEMS.

FOR MORE ADEQUATE CONTROL, ETV SHOULD MAINTAIN RECORDS SHOWING THE NUMBER OF

VIDEO TAPES RECEIVED, THE NUMBER SENT TO SCHOOLS AND THE BALANCE ON HAND.

VIDEO TAPES SHOULD BE STORED IN AN AREA WHICH CAN BE SECURED TO AVOID THE POSSIBILITY OF LOSS OR THEFT.

ETV SHOULD INCLUDE ON ITS INVENTORY LISTING ALL DURABLE ITEMS THAT ARE PURCHASED AS PROP FURNISHINGS.

Personnel Procedures

Introduction

The Audit Council reviewed personnel management practices at the Educational Television Network and found that several problems existed. Some hiring practices of ETV appear questionable, and 44 or 12% of ETV's employees are related. Also, top management has not completed employee performance appraisals. Each of these are discussed further in the following paragraphs.

Hiring Practices

The hiring practices of the South Carolina Educational Television Network appear to be questionable in that standard hiring practices were not followed in three instances for key management positions since 1975. One employee, who lacked the education or experience required, was reclassified into a top-level position by circumventing the agency's Standard Reclassification Procedure. Also, this individual was previously

promoted into a position without advertisement or solicitation of applications within or outside the agency. In addition, the review indicated that another position was filled without advertisement or solicitation of applications within or outside of the agency and was filled by an individual from another state. Another position was filled by an individual who lacked the State's minimum training and experience requirements.

Individuals selected for positions at ETV should meet the State's minimum training and experience requirements. Also, an equal opportunity should be afforded all eligible persons. ETV's license renewal applications to the Federal Communication Commission (FCC) required the network to submit an equal employment opportunity program which addresses recruitment, selection, promotion, and other areas of employment. ETV assured the FCC in applications that it would provide an equal employment opportunity to all qualified individuals.

The failure to ensure that fair employment opportunities are afforded all eligible individuals could place ETV in danger of losing its FCC license. Also, the absence of well-designed hiring practices and effective recruiting and screening policies limits the agency's ability to obtain qualified managers.

Related Employees

The Audit Council's review of employee personnel records revealed 44 full-time related employees as of June 20, 1980. There were 357 positions filled by full-time employees, therefore, 12% of the full-time work force was related. These relationships consisted of combinations such as husband-wife, brothers or sisters, father-son or mother-daughter, and brothers-in-law. Seven department or division heads had relatives in lower level positions in other departments in the agency.

Section 8-5-10 of the 1976 Code of Laws governing nepotism in the State Departments is limited in coverage stating that:

It shall be unlawful for any person at the head of any department of this government to appoint to any office or position of trust or emolument under his control or management any person related or connected with him by consanguinity or affinity within the sixth degree.

ETV staff developed a policy on nepotism dated May 23, 1977, yet the President and General Manager has neither approved nor implemented the policy.

...No individual in the future will be hired, promoted or transferred into any position in which he may be related or connected with his superiors within a division by consanguinity or affinity within the sixth degree. [Emphasis Added]

The State's policy on nepotism does not prohibit the hiring of persons related to division heads or others with influence within an agency, and ETV's proposed policy would only prevent the employment of relatives in positions under one's control or management. Because there are a large number of people working for ETV who are related, the potential for a conflict of interest exists.

Incomplete Employee Performance Appraisals

The Audit Council reviewed the latest Employee Performance appraisals available for division heads and found that top management has not completed the performance appraisals. The appraisals, except for the overall rating, were blank. All division heads received an overall rating of "outstanding" while all job performance and personal characteristics were ignored. Also, there was no justification given for rating four division heads "outstanding."

Top management, furthermore, has not evaluated five division heads. The Council reviewed employee performance appraisals in July 1980. The latest employee performance appraisal for one division head was January 13, 1976. Two division heads were last evaluated June 13, 1979, and one on May 12, 1979. Another division head was last rated January 13, 1979. Two division heads then received merit increases in violation of State Personnel policy.

The State Personnel Policies and Procedures Manual states:

An employee shall be appraised regularly on his/her performance in meeting defined standards set forth for the position. An employee shall not be expected to meet performance standards that have not been defined and explained as part of the requirements of the position to which the employee has been appointed. [Section 4.02, Paragraph C]

Employee performance appraisals shall be used...to determine the employees' eligibility for merit salary advances. [Section 4.02, Paragraph D]

The performance of each employee...shall be appraised at least thirty, but not more than ninety, calendar days prior to the employee's review date. [Section 4.03, Paragraph D]

Also, Part 20 of ETV's Employee Performance Appraisal states:

If an employee receives an outstanding or not satisfactory rating, a justification is required. (Be specific and cite examples of employees' skills, effort, output, etc.) [Emphasis Added]

As a result, top-level employees may not be treated equitably and a documented history of the employee's performance is not maintained.

RECOMMENDATIONS

THE STATE PERSONNEL DIVISION SHOULD REVIEW
ALL HIRING PRACTICES BY THE ETV COMMISSION
AND MAKE RECOMMENDATIONS TO THE BUDGET

AND CONTROL BOARD TO CORRECT ANY HIRING DEFICIENCIES.

THE ETV COMMISSION SHOULD DEVELOP APPROPRIATE POLICIES CONCERNING THE HIRING OF ANY PERSON RELATED TO AN ETV EMPLOYEE.

ETV MANAGEMENT SHOULD ADHERE TO STATE PERSONNEL RULES AND REGULATIONS PERTAINING TO EMPLOYEE PERFORMANCE APPRAISALS.

Travel

The Council examined ETV's adherence to the State travel regulations. As a part of the examination, the Council reviewed the records of the Comptroller General and the ETV Endowment and found that while the travel vouchers were properly maintained, there were instances of overpayment for travel expenses to certain individuals. ETV has recouped the overpayments for each individual involved.

The Council's review of the travel activities revealed that during 1978 two ETV employees traveled outside of the United States without Budget and Control Board approval. Both employees attended a conference in Yugoslavia and made a presentation to the British Broadcasting Corporation (BBC) in London on behalf of South Carolina ETV. A month later one of the employees returned to London and traveled from there to Nice and Paris, France and then back to London. The travel for the two employees was financed by the South Carolina ETV Endowment. The Council's examination of foreign travel by other ETV employees, in which non-State funds were used, revealed that the

necessary approval had been obtained. Apparently the employees involved were unaware of State regulations.

State travel regulations provide:

Any travel outside the United States will require prior approval of the State Budget and Control Board regardless of the sources of funds financing such travel.

The intent of having travel outside the United States reviewed by the Budget and Control Board is to provide an objective evaluation of the benefits to be derived in regard to the costs, whether in the form of travel expenses or an employee's time. The lack of approval by a party independent of an agency can result in unnecessary travel abroad.

RECOMMENDATION

ETV SHOULD STRICTLY ADHERE TO ALL TRAVEL REGULATIONS AND ENSURE THAT ALL EMPLOYEES ARE AWARE OF STATE TRAVEL REGULATIONS.

Procedures for Hiring Private Attorneys

The State does not have an adequate written, standardized procedure for State agencies to follow for hiring private attorneys. The State Code does not have any provisions governing the employment of a private attorney by a State agency. South Carolina Code Section 1-1-440 regulates the letting of contracts for products and services. However, the law states that, "the provisions of this section shall not apply to professional services where the person employed is customarily employed on a fee basis rather than by competitive bidding." To hire a private attorney on a fee basis, a State agency must receive approval from the State Attorney General. The State Attorney General can

assign a State attorney to represent an agency and he remains in that position even if a private attorney is hired. Once approval is given to hire a private attorney, the State does not require that a contract be signed or establish a standard procedure for billing. Although the State has no standardized hiring and fee procedures in employing private attorneys, ETV management has the responsibility to establish mechanisms and controls to ensure proper management oversight of public funds.

The Council found that ETV paid for the services of private attorneys without adequate documentation. ETV hired three private attorneys in Fiscal Year 1979-80. The agency was billed for two of the attorneys' services on a lump sum basis. The two billings do not contain a detailed statement of the time the two attorneys spent conducting ETV's business, or an itemized cost analysis of the services performed. The third attorney began itemizing his billings by time spent on ETV business in September 1979.

ETV forwards the bills it receives from private attorneys in their original form to the State Attorney General for approval. As an example, ETV paid one attorney \$5,511.91 between July 1, 1979 and June 9, 1980. These payments were made at seven different times based on seven separate lump sum bills submitted to ETV. The largest bill, submitted on March 1, 1979 for services rendered was for \$1,911.55. To earn this \$1,911.55, the private attorney attended an unspecified number of conferences and meetings and attended an all-day seminar at ETV. In addition, this billing included \$35.08 for telephone and photocopying costs and \$326.47 for travel.

To compare South Carolina's procedures for handling private attorney contracts with other states, the Audit Council contacted the Georgia and North Carolina state governments. In Georgia, the State Attorney General selects the attorney for the state agency and establishes the status of appointment, the hourly rate of compensation, the duration of the appointment, the type of services to be performed, and the supervision and coordination the Attorney General's Office will give to the private attorney.

In North Carolina, no state agency may hire a private attorney without the approval of the Governor. The Governor's Office puts the attorney under contract at a fixed hourly rate which cannot be changed, and his contract has to be renewed each year. The billing is sent to the Governor's Office for payment and it is broken down to the amount of time spent performing each service.

Without procedures to define the term of service, procedure for billing and what services are allowed for billing, ETV cannot control the payment for services and could be paying excessive prices or unnecessary costs. By merely processing the attorney's lump sum bills without question, ETV has reduced its control of payment for services.

RECOMMENDATION

THE GENERAL ASSEMBLY SHOULD CONSIDER
LEGISLATION WHICH ESTABLISHES PRIORITIES
AND PROCEDURES FOR STATE AGENCIES TO HIRE
PRIVATE ATTORNEYS. THE STATE ATTORNEY
GENERAL SHOULD HAVE THE AUTHORITY TO
SELECT THE ATTORNEY FOR THE AGENCY. THE

PROCEDURES SHOULD STIPULATE WHAT SERVICES ARE TO BE PERFORMED, THE DURATION OF THE APPOINTMENT WITH APPROVAL FOR RENEWAL REQUIRED ONCE A YEAR, THE RATE OF COMPENSATION, AND WHAT SERVICES ARE ACCEPTABLE FOR PAYMENT. BILLING PROCEDURES SHOULD INCLUDE SERVICES PERFORMED COMPUTED ON A TIME BASIS AT AN HOURLY RATE OF COMPENSATION.

Indirect Costs

ETV has not reported in their budget request to the Budget and Control Board indirect cost recoveries for credit to the General Fund. The Audit Council examined the grants ETV has been awarded for the past three years and found that ETV has not budgeted any indirect cost recoveries. ETV projected no indirect cost recoveries for Fiscal Years 1978-79 and 1979-80, but recovered \$11,676 in 1978-79, and \$46,803 in FY 79-80. For 1980-81, ETV has estimated no indirect cost recoveries.

Section 13 of the 1978-79 Appropriation Act states:

...It is the intent of the General Assembly that when expenditures of State funds are reimbursed by Federal or other funds...such reimbursements shall be returned to the General Fund of the State (and) shall include various indirect and overhead cost recoveries...

ETV is returning indirect costs to the General Fund and should budget these costs in their annual budget request.

Part 11, Section I of the 1978-79 Budget Preparation Manual states in part:

The reimbursements which are required to be deposited to the General Fund will be shown under the appropriate category...(of the agency's budget request).

The Auditor's Office is charged with providing an annual estimate of indirect funds collected from Federal and other programs for inclusion in the annual State General Appropriation Act. As a result, the State cannot accurately project revenues for the coming fiscal year. When State revenues are understated, the Legislature is not given the opportunity to appropriate these funds for needed programs.

ETV officials stated that they did not project any indirect cost recoveries because they cannot be sure they will receive any grants allowing indirect cost recoveries. Some grants do not allow indirect cost recoveries. Grants from the Corporation for Public Broadcasting only allow indirect cost recoveries for production grants. In an interview with the Audit Council, an official for the Grants and Contracts Review Unit stated that the grants received by ETV are consistent and ETV should attempt to budget indirect costs in their budget request.

RECOMMENDATION

ETV SHOULD PROVIDE THE GRANTS AND CONTRACTS REVIEW UNIT WITH A FAIR ESTIMATE OF INDIRECT COST RECOVERIES IN THEIR ANNUAL BUDGET REQUEST.

CHAPTER IV
RELATIONSHIP WITH OTHER AGENCIES AND OPERATIONS
IN OTHER STATES

ETV's Relationship With Other State Agencies

Introduction

In conducting the ETV audit, the Audit Council reviewed ETV's relationship with other State agencies, colleges and universities to determine whether State agencies were satisfied with the services they were receiving from ETV. In addition, the Council examined State agencies with TV production equipment to determine if the services provided with the equipment within the agencies could be provided more efficiently and effectively by ETV.

Satisfaction With ETV's Services

The Council reviewed the services which ETV provided to State agencies during FY 79-80. The services ranged from producing TV public service announcements to coordinating the transmission of seminars by closed circuit television to areas around the State. ETV charges the agencies only out-of-pocket costs and absorbs costs for personnel coordination and production time, and use of studios, equipment, and closed circuit air time.

The Council interviewed 28 client coordinators in 21 State agencies which requested and received ETV's assistance in production services during FY 79-80. Twenty-six of 28 agency personnel interviewed were satisfied or highly satisfied with services received from ETV. Fourteen client coordinators stated that they had not encountered any problems during their work with ETV. Problems were encountered by some

agencies, but many of these problems were outside ETV's control, and no consistently recurring problems were found. The Council concluded from the review that State agencies receiving services from ETV were generally satisfied with their relationship with ETV.

Utilization of Production Equipment in State Agencies

ETV expressed concern in its Plan for the 80's that there is "uncontrolled proliferation of broadcast equipment" in State agencies and institutions. ETV further stated, "Much of what is done at these sites could more efficiently and effectively be done at an ETV regional facility or at the ETV center by professionals in a fully cost-controlled environment." ETV bases these comments on its knowledge of the equipment that exists in some State agencies from day-to-day contact with the agencies.

The Council began to survey the TV production equipment in State agencies, colleges and universities to determine the types and value of TV production equipment and to assess the need for the equipment in the agencies. The Council contacted agencies identified by ETV with production equipment value in excess of \$10,000. Five State agencies and six colleges and universities were contacted by the Council to determine the value of production equipment and the uses of the equipment within the agency.

The value of production equipment and usage varied from agency to agency. Equipment value ranged as high as \$1,138,515 at the University of South Carolina where college credit courses are produced daily over live closed circuit television for broadcast to 19 locations throughout the State. The Council found that the agencies interviewed

use the equipment for instruction for students, staff training, critiquing videotapes of client behavior in various situations, live closed circuit or videotaped administrative meetings to avoid travel expenses and to produce public service announcements. The Council's conclusion from the information received was that the agencies which were contacted appear to be utilizing the equipment to provide needed services for the agencies. Most of these services either could not be provided by ETV with existing resources or could not be provided in a timely manner. It should be noted, however, that the Council contacted only a small percentage of State agencies with production equipment, but these were the agencies identified by ETV with relatively large amounts of production equipment.

While reviewing this area, the Council found that the Budget and Control Board requested ETV in February 1980 to "provide an inventory on what agencies are doing what in the television field for the Board's use." Since ETV had begun work on the inventory, the Council felt it unnecessary to complete its survey of State agency production equipment and thereby, duplicate the work of ETV. ETV can examine production equipment in State agencies in greater detail with the expertise available to ETV and can report its findings to the Budget and Control Board.

ETV Operations in Other States

The Legislative Audit Council reviewed information on ETV licensees and surveyed ten Southeastern states in June 1980 to determine the status of their ETV systems. The survey consisted of questions concerning educational and public television activities, instructional television for public schools and financial information.

The Council surveyed ten Southeastern states and received responses from seven states. The Council's survey indicated that differences existed in the number of production facilities, methods of providing instructional television to public schools and level of State funding in each system. For example, in the area of production facilities, the survey indicated that nine (24%) of these facilities are owned and operated by State Government ETV organizations, as in South Carolina, while 29 (76%) are owned and operated by Higher Education Institutions, local governments and regional organizations. Of the State-owned and operated production facilities, only South Carolina owns and operates more than one facility. Table 14 outlines the responses of seven Southeastern states and includes information on the facilities in South Carolina.

TABLE 14
NUMBER OF PRODUCTION FACILITIES OWNED AND OPERATED
BY NONPROFIT EDUCATIONAL ORGANIZATIONS

<u>State</u>	<u>Nonprofit Educational Organizations</u>				<u>Total Production Facilities</u>
	<u>State Agency</u>	<u>Education Institu- tions</u>	<u>Local Govern- ment</u>	<u>Regional Organi- zations</u>	
Alabama	1	4	2	-	7
Florida	-	4	2	3	9 ¹
Georgia	1	1	1	-	3
Kentucky	1	6	1	-	8
Louisiana	1	-	1	-	2 ²
Mississippi	1	-	-	-	1
North Carolina	-	3	1	-	4 ³
South Carolina	<u>4</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>4⁴</u>
TOTAL	9	18	8	3	38
Percent of Total Production Facilities	24	47	21	8	100

Source: LAC Survey, June 1980.

¹Plans to add three production facilities.

²Plan to increase but did not state exact number.

³Will be reduced to two facilities in 1980. Will retain one State-owned facility. The other facility is owned by the Charlotte-Mecklenburg Board of Education.

⁴South Carolina plans to add three production facilities.

Table 14 indicates that of the eight states where state agencies own and operate production facilities, South Carolina ETV owns and operates more than the other states. Concerning production facilities at higher education institutions, Kentucky indicated that these facilities meet specialized needs for higher education. In Alabama all higher education production centers relate to the Alabama ETV Commission on a contractual basis. The number of production facilities at higher education institutions in Florida comply with FCC rules requiring each institution having a license to maintain studio facilities. This FCC requirement also accounts for production facilities owned and operated by local governments and regional organizations.

The Council asked other states what percentage of their population was able to receive public broadcasting. Six of the seven states indicated that approximately 90-100% of their population could receive public broadcasting. Louisiana, the seventh state, indicated that 66% of its population could receive public broadcasting. South Carolina ETV indicated that based on Public Broadcasting Communication Research AREAPOPOP figures, 57.7% of the population can receive public broadcasting. AREAPOPOP is a computer based, terrain sensitive method of predicting station coverage contours and identifying the population characteristics within those contours.

In providing Instructional Television to public schools the methods used and the percentage of students receiving ITV for responding states and South Carolina are shown in Table 15.

TABLE 15
METHODS USED BY SOUTHEASTERN STATES TO DELIVER
INSTRUCTIONAL TELEVISION TO PUBLIC SCHOOLS

<u>State</u>	<u>Methods Used by States</u>				<u>Percent¹ Reception Rate</u>
	<u>Open Circuit</u>	<u>Closed Circuit</u>	<u>ITFS</u>	<u>Video Tape</u>	
Alabama	x	-	x	x ²	80
Florida	x	x	-	x	50-75
Georgia	x	-	-	x ³	90-95
Kentucky	x	-	-	-	90
Louisiana	x	x ⁴	-	-	N/A
Mississippi	x	-	-	-	61
North Carolina	x	-	-	-	85
South Carolina	x	x	x	x	80

Source: LAC Survey, June 1980.

¹Students in public schools capable of receiving ITV.

²Operated by various city school systems.

³Georgia is currently conducting a pilot project on video tape duplication at its Savannah station.

⁴Louisiana is studying the use of closed circuit.

Table 15 indicates that of the four methods available for use, all of the responding states except North Carolina and Mississippi employ more than one method. Only South Carolina ETV uses all of these methods to deliver ITV to public schools. Instructional Television Fixed Service (ITFS) is a State-owned microwave system used only by South Carolina and Alabama that provides closed circuit capabilities to schools equipped to receive the signal.

All responding states indicated that information pertaining to utilization of Instructional Television was collected. In South Carolina an annual utilization survey is conducted by the Office of Instructional Television and Radio, State Department of Education. In Alabama, the State Department of Education conducts an annual utilization survey. Florida's Office of Instructional Television and Radio measures utilization by reviewing the number of Instructional Television series requested by teachers during the year.

In determining the impact of Instructional Television on education, only two states (Georgia and Mississippi) indicated that studies had been conducted. The Georgia study was conducted in 1975 and the Mississippi study was conducted in 1979.

Expenditures for Public and Instructional Television and per capita expenditure by State for responding states are shown in Table 16.

TABLE 16
EXPENDITURES FOR INSTRUCTIONAL AND PUBLIC TELEVISION
BY SOURCE FOR FY 78-79

<u>State</u>	<u>Expenditure by Source</u>				<u>Per Capita¹ Expenditure State Funds</u>
	<u>State</u>	<u>Federal</u>	<u>Other</u>	<u>Total</u>	
Alabama	\$ 250,000	\$ -0-	\$ 95,000	\$ 345,000	\$.60
Florida	4,500,000	N/A	N/A	N/A	.51
Georgia	3,850,000	-0-	740,000	4,590,000	.77
Kentucky	7,258,257	-0-	1,473,183	8,731,440	2.07
Louisiana	6,460,085	49,671	556,533	7,066,289	1.79
Mississippi	3,926,300	40,720	759,432	4,726,452	1.78
North Carolina	1,800,000	50,000	330,000	2,180,000	.36
South Carolina	9,827,724	164,486	3,410,351	13,402,561	3.39

Source: LAC Survey, June 1980.

¹Per capita expenditure of State funds based on State population.

N/A - Not available.

Expenditures of State funds for these states range from \$250,000 for Alabama to \$9,827,724 for South Carolina. Federal funds consist of grants for the purchase of equipment for ETV and Public Radio facilities. "Other" funds consist of Community Service Grants provided to ETV stations by the Corporation of Public Broadcasting to underwrite the cost of program production. Information on expenditures for Florida are unavailable because each station is independent and no state records are maintained that show these amounts.

In order to receive Instructional Television in public schools, two states (Georgia and North Carolina) indicated that all costs incurred are paid by the schools. In three states (Kentucky, Mississippi, South Carolina) schools share their cost with the State on a matching fund basis. Alabama and Louisiana indicated that public schools do not pay any of the cost incurred to receive Instructional Television.

APPENDICES

APPENDIX A
INSTRUCTIONAL TELEVISION AND RADIO SURVEY

One of the major objectives of this audit was to determine actual usage of Instructional Television in public schools. Because the Office of ITV and Radio statistics do not differentiate between regular or sporadic use of ITV or the amount of time ITV is used, the Audit Council designed and conducted a survey to help answer these questions.

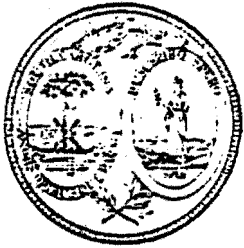
In April 1980, the Audit Council randomly surveyed 1,000 teachers in areas that have high potential for ITV viewing and 403 (40.3%) responded. The responses to these questionnaires provided insight into actual usage of ITV and Radio and teachers' opinions of this teaching aid. High potential viewing areas for elementary schools are those with ETV transmitters in the county and include the following counties: Barnwell, Beaufort, Charleston, Florence, Greenville, Richland, Sumter and York. High potential viewing areas for secondary schools are those with tape and delay centers, located in the following areas: Barnwell, Beaufort, Florence, Darlington, Greenwood, Lake City, Greenville, Irmo-Chapin, Richland, Rock Hill, Spartanburg and Sumter. A Lexington school district had a tape and delay center but was not included in the survey because it was in its first year of operation.

A copy of the cover letter and questionnaire sent to the teachers with the compiled responses follows. The figures in the answer spaces represent the percentage of those responding to the question who provided that particular answer. Because not every respondent answered every question, the number responding to each question is listed in the margin. For example, N = 250 means that 250 respondents answered

APPENDIX A (CONTINUED)

that question. The letters R.D. in the margin denote that figures in the blanks are raw data (actual number of responses). Raw data is provided in these cases because some questions were designed to allow the respondent to provide more than one answer to that question. Asterisks denote the median response (middle number of all responses) to a question where appropriate.

APPENDIX A (CONTINUED)



LEGISLATIVE AUDIT COUNCIL

STATE OF SOUTH CAROLINA

500 BANKERS TRUST TOWER
COLUMBIA, SOUTH CAROLINA 29201

TELEPHONE:
803 - 758-5322

April 29, 1980

PUBLIC MEMBERS

ROBERT S. SMALL, JR.
Chairman

CARL B. HARPER, JR.
F. HALL YARBOROUGH

Dear Educator:

At the request of the South Carolina General Assembly, the Legislative Audit Council is studying the South Carolina Educational Television Network. As part of this study, you have been randomly selected from educators across the State to participate in a survey concerning the development of Instructional Television.

EX-OFFICIO MEMBERS

SENATE

NANCY STEVENSON
Lt. Governor
Pres. - Senate

L. MARION GRESSETTE
Pres. Pro Tempore
Chm. - Judiciary Comm.

REMBERT C. DENNIS
Chm. - Finance Comm.

Regardless of whether you use Instructional Television, we would greatly appreciate your honest and candid answers to the enclosed questionnaire. It is extremely important that we receive representative information concerning the use of Instructional Television in South Carolina.

It is not necessary that you identify yourself since we are only interested in your response. Upon completion, please return the questionnaire directly to the Audit Council in the postage paid envelope provided. It would be most helpful if we could have your response by May 9, 1980.

If you have any questions regarding this project, please do not hesitate to call J. Carl Jordan at 758-5322. Your input into this study is greatly appreciated.


HOUSE

REN L. CARTER
Speaker of House

TOM G. MANGUM
Chm. - Ways & Means Comm.

ROBERT L. McFADDEN
Chm. - Judiciary Comm.

Sincerely,


George L. Schroeder
Director

GLS/TJB/par

Enclosure

APPENDIX A (CONTINUED)

QUESTIONNAIRE

- N=401 1. What grade level do you teach? 01 59 Elementary(K-6) 02 41 Secondary(7-12)
2. On an average school day how many students do you teach? (If you teach more than one class, indicate in Column 1 the number of students you teach in all classes and in Column 2 the number of classes you teach)
- N=371 01 67 (# students) * N=302 02 4.8 (# classes) *
- R.D. 3. Which subject(s) do you teach? (Check all that apply)
- | | |
|---|--|
| 01 <u>154</u> Elementary subjects only
(go to next question) | 08 <u>73</u> Math |
| 02 <u>17</u> Art | 09 <u>18</u> Music |
| 03 <u>12</u> Career/Vocational Education | 10 <u>25</u> Physical Education/Health Education |
| 04 <u>7</u> Foreign Language | 11 <u>62</u> Reading |
| 05 <u>7</u> Home Economics | 12 <u>57</u> Science |
| 06 <u>0</u> Industrial Education | 13 <u>48</u> Social Science |
| 07 <u>64</u> Language Arts other than reading | 14 <u>26</u> Special Education |
| | 15 <u>24</u> Other (Specify) _____ |
- N=400 4. Indicate whether you used any ITV series during the 79-80 school year regardless of whether on air, on film or videotape. (Check one)
- | | |
|--------------------------------|---|
| 01 <u>38</u> In the past week | 04 <u>19</u> Have used ITV but not in past year (go to Question 13) |
| 02 <u>10</u> In the past month | 05 <u>18</u> Have never used ITV (go to Question 13) |
| 03 <u>15</u> In the past year | |
- N=256 5. How often is a television set available when you need it? (Check one)
- | | |
|-------------------------------|------------------------------|
| 01 <u>82</u> Always | 03 <u>5</u> Some of the time |
| 02 <u>12</u> Most of the time | 04 <u>1</u> Seldom |
- N=250 6. How many different ITV series do you use regularly (i.e., approximately 75 percent of all lessons in the series)? (Check one)
- | | |
|-----------------------|-------------------------------|
| 01 <u>16</u> None | 04 <u>16</u> 3 series |
| 02 <u>25</u> 1 series | 05 <u>8</u> 4 series |
| 03 <u>24</u> 2 series | 06 <u>11</u> 5 or more series |
- N=251 7. Estimate the average amount of time you use ITV with your class(es) each week. (If you teach more than one group of students answer for the total cumulative amount of time) (Check one)
- | | |
|--|---------------------------------------|
| 01 <u>7</u> None | 06 <u>9</u> 2 hours and under 3 hours |
| 02 <u>16</u> less than ½ hour | 07 <u>3</u> 3 hours and under 4 hours |
| 03 <u>25</u> ½ hour and under 1 hour | 08 <u>2</u> 4 hours and under 5 hours |
| 04 <u>25</u> 1 hour and under 1½ hours | 09 <u>3</u> 5 hours or more |
| 05 <u>10</u> 1½ and under 2 hours | |

APPENDIX A (CONTINUED)

8. In reference to the preceding question, estimate the number of your classes and students with which you use ITV each week. (For example, if you teach 5 classes each day and use ITV for 2 classes, indicate 2 classes and the total number of viewing students).

N=197 01 1.9 # classes* N=200 02 31 # students*

- R.D. 9. What are the subjects for which you regularly used ITV this school years? (Check all that apply)

01 <u>28</u> Art	08 <u>21</u> Music
02 <u>10</u> Career/Vocational Education	09 <u>24</u> Physical Education/Health Education
03 <u>3</u> Foreign Language	10 <u>80</u> Reading
04 <u>101</u> Language Arts Other than reading	11 <u>62</u> Science
05 <u>0</u> Home Economics	12 <u>102</u> Social Studies
06 <u>1</u> Industrial Education	13 <u>4</u> Special Education
07 <u>49</u> Math	14 <u>16</u> Other (Special)

- N=249 10. How long did you spend discussing (or otherwise preparing for) lessons in the series in class before the class viewed them? (Check one)

01 <u>8</u> None	04 <u>12</u> 11-15 minutes
02 <u>38</u> 1-5 minutes	05 <u>14</u> More than 15 minutes
03 <u>28</u> 6-10 minutes	

- N=243 11. Are lesson guides available for programs you are now using?

01 <u>58</u> Always	03 <u>6</u> Seldom
02 <u>28</u> Most of the time	04 <u>8</u> Never

- N=232 12. Do you use the lesson guides?

01 <u>29</u> Always	03 <u>16</u> Seldom
02 <u>47</u> Most of the time	04 <u>8</u> Never

The following are statements which may be reasons you use or do not use ITV. Please write the appropriate number in the blank by each question which corresponds to your use of ITV based on the following scale.

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>
Strongly Agree	Agree	Mildly Agree	Un- certain	Mildly Disagree	Disagree	Strongly Disagree	No Opinion	Do Not Know

Note: Responses to Statements 13 through 24 are grouped into 3 categories. If a teacher answered 1, 2 or 3, the response counts as agree. If a teacher answered 5, 6, or 7, the response counts as disagree. If a teacher answered 4, 8, or 9, the response counts as uncertain or no opinion.

APPENDIX A (CONTINUED)

		% Agree	% Disagree	Uncertain/ No Opinion
N=393	13. There are programs available which meet my existing curriculum needs.	76	14	10
N=391	14. Broadcast schedules are convenient.	53	32	15
N=387	15. Reception is good in my class.	67	16	17
N=391	16. Equipment is in good repair when I need it.	77	12	11
N=393	17. ITV offers much educational benefit to the students.	82	5	13
N=391	18. Parents think ITV is a good idea.	38	4	58
N=387	19. It is difficult to get programs recorded for later playback.	27	43	30
N=392	20. I feel I am pressured to use ITV from the building coordinator, administrators or other teachers.	2	94	4
	Using the same scale, please indicate your opinion of the following statements by writing the applicable numbers in the blank by each question.			
N=380	21. I use ITV occasionally for a TV special of other program which may be of student interest.	67	25	8
N=383	22. I use ITV like I would use a filmstrip or any other teacher's aid.	72	20	8
N=391	23. Without ITV, I feel the quality of education in South Carolina would decline.	44	30	26
N=390	24. I feel that funds spent on ITV could be better utilized in other areas of education in my school.	18	57	25
N=384	25. Indicate whether you used any Instructional <u>Radio</u> series during the 79-80 school year. (Check one)			
	01 <u>1.6</u> In the past week		04 <u>9.6</u> Have used Instructional Radio but not in the past year.	
	02 <u>2.6</u> In the past month		05 <u>81.5</u> Have never used Instructional Radio	
	03 <u>4.7</u> In the past year			
N=394	26. Has anyone from ITV, ETV or your school tried to influence your response to this survey? 01 <u>.5</u> Yes 02 <u>99.5</u> No			
	27. Feel free to make other comments or suggestions. _____			

N = The number of respondents answering a question.
 * = Median number (middle number) of all respondents to a question.
 RD = Raw Data - The number respondents to each option when more than one response was possible.

APPENDIX B

NIELSEN RATINGS WITHIN DESIGNATED MARKET AREAS

Columbia - May 1980

Station	Time Periods					
	Monday - Friday				Saturday - Sunday	
	4:30 p.m.-7:30 p.m.		8:00 p.m.-11:00 p.m.		8:00 p.m.-11:00 p.m.	
	# of HH Viewing	% HH Viewing	# of HH Viewing	% HH Viewing	# of HH Viewing	% HH Viewing
Total HH ¹	71,647	100	111,451	100	109,461	100
A	35,824	50	45,694	41	43,784	40
B	9,314	13	22,290	20	20,797	19
C	9,314	13	20,061	18	20,797	19
ETV	1,432	2	2,229	2	2,189	2

Columbia - February 1980

Station	Time Periods					
	Monday - Friday				Saturday - Sunday	
	4:30 p.m.-7:30 p.m.		8:00 p.m.-11:00 p.m.		8:00 p.m.-11:00 p.m.	
	# of HH Viewing	% HH Viewing	# of HH Viewing	% HH Viewing	# of HH Viewing	% HH Viewing
Total HH ¹	91,549	100	125,382	100	125,382	100
A	45,775	50	42,630	34	43,884	35
B	14,647	16	23,822	19	22,569	18
C	10,985	12	26,330	21	27,584	22
ETV	915	1	2,507	2	2,507	2

APPENDIX B (CONTINUED)

Columbia - May 1979

Station	Time Periods					
	Monday - Friday				Saturday - Sunday	
	4:30 p.m.-7:30 p.m.		8:00 p.m.-11:00 p.m.		8:00 p.m.-11:00 p.m.	
	# of HH Viewing	% HH Viewing	# of HH Viewing	% HH Viewing	# of HH Viewing	% HH Viewing
Total HH ¹	73,393	100	104,296	100	106,227	100
A	41,834	57	39,632	38	39,303	37
B	10,275	14	20,859	20	20,183	19
C	8,807	12	21,902	21	24,432	23
ETV	734	1	3,129	3	3,186	3

Columbia - February 1979

Station	Time Periods					
	Monday - Friday				Saturday - Sunday	
	4:30 p.m.-7:30 p.m.		8:00 p.m.-11:00 p.m.		8:00 p.m.-11:00 p.m.	
	# of HH Viewing	% HH Viewing	# of HH Viewing	% HH Viewing	# of HH Viewing	% HH Viewing
Total HH ¹	90,776	100	113,953	100	115,884	100
A	50,834	56	41,022	36	40,559	35
B	14,524	16	26,209	23	25,494	22
C	9,985	11	26,209	23	28,971	25
ETV	1,815	2	1,140	1	1,159	1

APPENDIX B (CONTINUED)

Greenville-Spartanburg - May 1980

<u>Station</u>	<u>Time Periods</u>					
	<u>Monday - Friday</u>				<u>Saturday - Sunday</u>	
	<u>4:30 p.m.-7:30 p.m.</u>		<u>8:00 p.m.-11:00 p.m.</u>		<u>8:00 p.m.-11:00 p.m.</u>	
	<u># of HH</u> <u>Viewing</u>	<u>% HH</u> <u>Viewing</u>	<u># of HH</u> <u>Viewing</u>	<u>% HH</u> <u>Viewing</u>	<u># of HH</u> <u>Viewing</u>	<u>% HH</u> <u>Viewing</u>
Total HH ¹	205,772	100	290,191	100	284,915	100
A	65,847	32	98,665	34	96,871	34
B	*	*	2,902	1	2,849	1
C	59,674	29	63,842	22	65,530	23
ETV	*	*	2,902	1	2,849	1
D	53,475	26	92,861	32	88,324	31

Greenville-Spartanburg - February 1980

<u>Station</u>	<u>Time Periods</u>					
	<u>Monday - Friday</u>				<u>Saturday - Sunday</u>	
	<u>4:30 p.m.-7:30 p.m.</u>		<u>8:00 p.m.-11:00 p.m.</u>		<u>8:00 p.m.-11:00 p.m.</u>	
	<u># of HH</u> <u>Viewing</u>	<u>% HH</u> <u>Viewing</u>	<u># of HH</u> <u>Viewing</u>	<u>% HH</u> <u>Viewing</u>	<u># of HH</u> <u>Viewing</u>	<u>% HH</u> <u>Viewing</u>
Total HH ¹	263,810	100	342,953	100	342,953	100
A	76,505	29	106,315	31	109,745	32
C	71,229	27	92,598	27	96,027	28
ETV	*	*	3,430	1	3,430	1
D	79,143	30	113,174	33	106,315	31

APPENDIX B (CONTINUED)

Greenville-Spartanburg - November 1979

<u>Station</u>	<u>Time Periods</u>					
	<u>Monday - Friday</u>				<u>Saturday - Sunday</u>	
	<u>4:30 p.m.-7:30 p.m.</u>		<u>8:00 p.m.-11:00 p.m.</u>		<u>8:00 p.m.-11:00 p.m.</u>	
	<u># of HH</u> <u>Viewing</u>	<u>% HH</u> <u>Viewing</u>	<u># of HH</u> <u>Viewing</u>	<u>% HH</u> <u>Viewing</u>	<u># of HH</u> <u>Viewing</u>	<u>% HH</u> <u>Viewing</u>
Total HH ¹	242,705	100	321,848	100	321,848	100
A	84,947	35	106,210	33	106,210	33
B	2,427	1	*	*	*	*
C	50,968	21	80,462	25	83,681	26
ETV	*	*	*	*	*	*
D	75,239	31	106,210	33	102,991	32

Greenville-Spartanburg - July 1979

<u>Station</u>	<u>Time Periods</u>					
	<u>Monday - Friday</u>				<u>Saturday - Sunday</u>	
	<u>4:30 p.m.-7:30 p.m.</u>		<u>8:00 p.m.-11:00 p.m.</u>		<u>8:00 p.m.-11:00 p.m.</u>	
	<u># of HH</u> <u>Viewing</u>	<u>% HH</u> <u>Viewing</u>	<u># of HH</u> <u>Viewing</u>	<u>% HH</u> <u>Viewing</u>	<u># of HH</u> <u>Viewing</u>	<u>% HH</u> <u>Viewing</u>
Total HH ¹	210,683	100	282,623	100	277,484	100
A	67,418	32	79,134	28	77,695	28
B	2,107	1	2,826	1	*	*
C	44,243	21	79,134	28	77,695	28
ETV	*	*	2,826	1	2,775	1
D	69,525	33	96,092	34	94,345	34

APPENDIX B (CONTINUED)

Charleston - May 1980

<u>Station</u>	<u>Time Periods</u>					
	<u>Monday - Friday</u>				<u>Saturday - Sunday</u>	
	<u>4:30 p.m.-7:30 p.m.</u>		<u>8:00 p.m.-11:00 p.m.</u>		<u>8:00 p.m.-11:00 p.m.</u>	
	<u># of HH</u> <u>Viewing</u>	<u>% HH</u> <u>Viewing</u>	<u># of HH</u> <u>Viewing</u>	<u>% HH</u> <u>Viewing</u>	<u># of HH</u> <u>Viewing</u>	<u>% HH</u> <u>Viewing</u>
Total HH ¹	69,823	100	88,038	100	86,520	100
A	13,964	20	22,890	26	24,226	28
B	18,154	26	29,053	33	26,821	31
C	33,515	48	31,694	36	31,147	36
ETV	1,396	2	2,641	3	3,461	4

Charleston - February 1980

<u>Station</u>	<u>Time Periods</u>					
	<u>Monday - Friday</u>				<u>Saturday - Sunday</u>	
	<u>4:30 p.m.-7:30 p.m.</u>		<u>8:00 p.m.-11:00 p.m.</u>		<u>8:00 p.m.-11:00 p.m.</u>	
	<u># of HH</u> <u>Viewing</u>	<u>% HH</u> <u>Viewing</u>	<u># of HH</u> <u>Viewing</u>	<u>% HH</u> <u>Viewing</u>	<u># of HH</u> <u>Viewing</u>	<u>% HH</u> <u>Viewing</u>
Total HH ¹	85,002	100	101,699	100	100,181	100
A	21,251	25	31,527	31	32,058	32
B	17,850	21	31,527	31	32,058	32
C	41,651	49	37,629	37	35,063	35
ETV	1,700	2	2,033	2	2,004	2

APPENDIX B (CONTINUED)

Charleston - November 1979

Station	Time Periods					
	Monday - Friday				Saturday - Sunday	
	4:30 p.m.-7:30 p.m.		8:00 p.m.-11:00 p.m.		8:00 p.m.-11:00 p.m.	
	# of HH Viewing	% HH Viewing	# of HH Viewing	% HH Viewing	# of HH Viewing	% HH Viewing
Total HH ¹	80,449	100	95,628	100	97,146	100
A	17,699	22	27,732	29	31,087	32
B	20,917	26	29,645	31	30,115	31
C	38,616	48	37,295	39	36,915	38
ETV	1,609	2	2,869	3	1,943	2

Charleston - May 1979

Station	Time Periods					
	Monday - Friday				Saturday - Sunday	
	4:30 p.m.-7:30 p.m.		8:00 p.m.-11:00 p.m.		8:00 p.m.-11:00 p.m.	
	# of HH Viewing	% HH Viewing	# of HH Viewing	% HH Viewing	# of HH Viewing	% HH Viewing
Total HH ¹	64,416	100	87,840	100	86,376	100
A	16,748	26	27,230	31	27,640	32
B	15,460	24	26,352	30	26,777	31
C	28,343	44	32,501	37	30,231	35
ETV	644	1	2,635	3	2,591	3

¹This total includes not only the major stations' viewing audiences listed below, but also smaller stations which do not meet the minimum reporting standards. Thus, stations A, B, C and ETV do not completely account for the total viewing audience figure.

*Station's share of the audience is too small to be reported.

Source: A. C. Nielsen Station Index - Viewer in Profile.

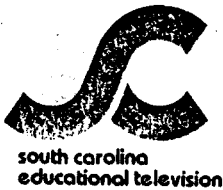
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APPENDIX E



south carolina
educational television

drawer L
2712 millwood avenue
columbia, south carolina 29250

April 8, 1981

Mr. George L. Schroeder
Director
Legislative Audit Council
620 Bankers Trust Tower
Columbia, South Carolina 29201

Dear George:

Thanks for the opportunity to go over the draft audit on ETV with Carl Jordan. I am glad to see that this effort is reaching a conclusion, and I think that the staff on both sides have been diligent in their efforts. Certainly some good has already come from the audit, and I hope that we will be able to work together to get maximum benefit.

As you know, the ETV Commission has been working with its staff to correct many of the weaknesses that your audit has identified. Some of the things that you suggested had been previously identified and were being pursued independent of the audit.

I would like to take this opportunity to cite for the record some of the work that has already been in progress.

1. Utilization of Instructional Television in the Schools

One of the first areas that I began to look at when I became Chairman was how to improve utilization of instructional television in the schools. The Commission is interested in both the quality of use, the quantity of use, and efficiency of distribution. You know that the quality and quantity of use is a shared responsibility between ETV and the Department of Education. Therefore, I agree with your recommendation that an independent study of utilization be done. The ETV staff will continue its current effort with outside consultants and with our suppliers to improve the efficiency of distribution.

2. Cost Effective Use of Facilities and Equipment

Another area of major concern to the Commission has been the cost effective use of equipment and facilities. This is a multifaceted issue.

Mr. George L. Schroeder

Page 2

April 8, 1981

The Commission called for a moratorium on the plans for regional studios at my request in December of 1979. A sub-committee of the Commission studied this issue and found that commitments had been made both in terms of funds through bond appropriation and facilities on the parts of people and agencies within the communities. Therefore, the Commission accepted the existing commitments. Funding for these commitments will be pursued in the General Assembly. The General Assembly's determination of whether or not to fund these commitments will govern.

The Commission has recommended to members of the Budget and Control Board and the Legislature that a regular appropriation to support the normal replacement of equipment be established. We should not continue to use bond funds to replace equipment in a sporadic and halting manner. Replacements should be planned and provided for in a manner consistent with good business practice.

The equipment itself has been carefully reviewed to insure that technological advances are employed in a cost effective manner. We have begun the conversion to one-inch videotape machines, smaller mobile units, and new cameras which require less light. The equipment that has been purchased since I assumed the Chairmanship has been for replacement purposes. Capacity has not been expanded except through efficiencies of new equipment.

3. Inventory Control of TV Sets in the Schools

ETV has already restructured its staff to get better control on the inventory of television sets. The recent ruling by the Attorney General strengthens our effort to exercise more control in the area of school equipment usage. We will follow your recommendation for tracking, checking, and reassigning equipment to maximize use. We will also work with the Department of Education to distribute equipment on the basis of statewide need.

Original or new recommendations that you have made that we intend to follow are:

1. The staff is working enthusiastically to implement a reasonable subscription charge for the ETV Guide to users other than school personnel.
2. Your comments on hiring practices are being taken seriously. The agency head will review and, only if appropriate, approve the hiring of any person related to an ETV employee.

Mr. George L. Schroeder

Page 3

April 8, 1981

Please accept this direct assessment of where ETV stands. You can count on me and the entire Commission to work toward implementation of your sound recommendations.

With warm personal regards,

Walter R. Pettiss
mcb

Walter R. Pettiss
Chairman

mb



south carolina
educational television

drawer L
2712 millwood avenue
columbia, south carolina 29250

HENRY J. CAUTHEN
president

MEMORANDUM

TO: Albert M. Gross

FROM: Henry J. Cauthen

DATE: April 10, 1981

Enclosed are three copies of the ETV 10-page response to your Report.
Please call me if I can be of any assistance.

mb
enclosures

INTRODUCTION

Over the years, the South Carolina ETV Network has established itself in the view of most observers as the leading educational communications system in the world. We have been studied by educators, governmental leaders, and industry experts from every state and more than 50 foreign countries. Our system is looked upon as a model of quality and efficiency and is commonly recognized as the most effective and efficient educational broadcasting system yet developed.

ETV has also been formally and thoroughly scrutinized by numerous management studies. Their findings have been unanimously positive. One of the most intensive studies of ETV was conducted by the Governor's Management Review Commission, a scrutiny of State agencies by businessmen with interests in related fields, to eliminate any inefficiency or deficient management practice in State government. It endorsed the work of ETV strongly. It recommended expanding ETV throughout the State and made other positive comments; its criticisms were negligible.

The positive assessments we have received throughout the years have been reassuring to those of us who have worked so hard to build this system. We, of course, realize that there is likely room for improvement in any organization and readily acknowledge that to be the case with ETV. We look upon the recommendations made by the Legislative Audit Council as a result of their intensive, 17-month study of ETV as a valuable tool in assisting us to make such improvements.

In this context, it is essential to understand that the LAC Study is not intended to be a comprehensive report of all aspects of agency activities and services, but rather concentrates its efforts on identifying any weaknesses where improvements need to be made. To view it otherwise would inevitably lead to an inaccurate and distorted view of ETV's overall effectiveness, efficiency, and the value of its numerous services to the State.

There are 27 recommendations of the Legislative Audit Council in this Report addressed to ETV. Of these, 7 were in place prior to the audit, 12 were implemented during the audit, 1 is under study, 2 are being worked on jointly with the Department of Education, and ETV respectfully disagrees with 5 of them.

Work was in progress before the Legislative Audit Council began its study on the following 7 recommendations: (Comments Follow)

IN PLACE PRIOR TO AUDIT

- Moratorium on Regional Studios
- Evaluate Remote Production Vehicles
- Terminate Closed Circuit Schools Not Using
- Consider Video Tape Duplication as Alternative to Closed Circuit
- Expend State Funds Only for Purposes Appropriated
- Fully Justify Budget Request, Including Equipment Schedules
- Adhere to Travel Regulations

The Legislative Audit Council study was responded to while in progress by ETV with the implementation of the following 12 recommendations: (Comments Follow)

IMPLEMENTED DURING AUDIT

- Inventory School Equipment
- Move State Purchased Sets to Using Schools
- Survey Viewing Audiences Not Covered Now
- Negotiate a Contract with Utilities for Closed Circuit
- Develop Written Procedures to Terminate Low Utilization Schools
- Develop Policies and Procedures Manual
- Change Inventory on "Items Never Used"
- Records on Video Tapes Received and Sent to Schools
- Store School Tapes Securely
- Develop Policy on Hiring Related Persons
- Adhere to Rules on Performance Appraisals
- Estimate Indirect Cost Recoveries in Budget

The following recommendation is being studied by ETV to see if it is practical:

BEING STUDIED

- Charge a Subscription Fee for ETV Guide

The following 2 recommendations are addressed jointly to ETV/ITV but in reality are the primary responsibility of the State Department of Education. ETV has no objection to either.

WORKING WITH DEPARTMENT OF EDUCATION

- An Independent Study of Utilization Should Be Conducted
- School Equipment Matching Funds Should Be Distributed Statewide,
Not By Districts

There are certain areas in which Legislative Audit Council recommendations deal with matters of ETV policy where the expertise of the ETV staff and the authority of the ETV Commission far outweigh the opinions of the Legislative Audit Council staff with no experience in educational broadcasting. We disagree with the following 5 recommendations: (Comments Follow)

DISAGREE

- No Funds for Instructional Radio
- Consider Discontinuing Funds for Tape and Delay Centers
- State Personnel Review Hiring and Report to Budget and Control Board
- Base School Equipment Decisions on Time and Number of Programs Used
- Inventory Stage Props as Durable Items

COMMENTS -- IN PLACE PRIOR TO AUDIT

MORATORIUM ON REGIONAL STUDIOS

ETV has just completed a study and review as recommended. A moratorium was called and all aspects of the regional studio policies were fully reviewed by the ETV Commission. To do this again would only duplicate the work just completed. The recommendation has been followed. That process need not be repeated. ETV Commission

members have thoroughly evaluated such studios and their costs. For the purpose of making this study ETV Commission Chairman Walter R. Pettiss appointed a special committee consisting of Commission members John M. Rivers, Cordes G. Seabrook, Jr. and Jack W. Newton. The single and specific mandate of that committee was to study every aspect of the entire question of regional studios and it did in fact cover every question mentioned in the LAC Report. The committee concluded their study with a meeting in Columbia on December 18, 1979, with all committee members and Chairman Pettiss in attendance. The committee unanimously recommended that ETV proceed with the development of regional studios where previous community commitment existed and recommended that funding should be requested from the Legislature for that purpose. It also recommended no regional studio for Orangeburg. That recommendation was approved by the full Commission at its next meeting on January 8, 1980, and presented to the Governor and the Budget and Control Board later that month, as part of our Plan for the Eighties. Subsequently, the Legislature provided funding requested for the necessary studio equipment for Spartanburg, Conway and Greenwood and initial staffing for Spartanburg and Conway. Both items were later signed into law by the Governor.

 * Legislative Audit Council Comment - Based on ETV's comments the *
 * Council has reconsidered its recommendation and made appropriate adjust- *
 * ments in the report. *

It should be pointed out that the LAC Report contains conclusions regarding the responsibility of a licensee to provide local studios that conflict directly with recent FCC rules and decisions as well as qualified legal interpretations. The FCC has the authority to excuse a station from compliance as they did in 1978 with the Savannah, Georgia, station mentioned in the LAC Report. They have, however, in more recent rulings chosen not to excuse stations from compliance.

For example, in November of 1979, the FCC ruled that New York ETV station WNET-TV must build studios in Newark since that is its principal city of license. This ruling was made even though WNET had a major studio facility only a few miles away in New York City. A group of citizens had petitioned the FCC to deny the renewal of WNET's license. The FCC ordered the station to come up with a "bricks and mortar" proposal for a Newark studio or face the loss of its license. It was given until June 1, 1981, to implement the proposal. In August of 1980, the FCC denied the renewal of station KIFM, San Diego, California, saying it had failed to make good-faith efforts to carry out its programming proposals and had failed to present programming responsive to community needs. It was ordered off the air by October 4, 1980, and the station is now involved in a complicated appeal procedure.

Let it be clear, however, that in committing to build regional studios ETV was not just attempting to predict the direction of the FCC rulemaking. ETV was reconfirming a long-held ETV Commission policy based on consideration of all basic elements of this question including number of programs produced, value of service to the schools and the general public, prior commitments to the communities, and overall effectiveness of operation.

EVALUATE REMOTE PRODUCTION VEHICLES

ETV endorses a continuing evaluation of remote vehicle requirements as a sound concept, but we feel that inclusion of this recommendation in the LAC Report is inappropriate and potentially misleading in light of the fact that regional station managers and ETV management in Columbia recognized a need for such a review well before LAC came into the picture. ETV began a study in the latter months of 1978 and did the following:

1. Transferred the remote production vehicles from Sumter and Beaufort to Columbia. Those two regional stations are now using highly portable equipment for outside broadcast activities and are transporting both equipment and personnel in standard vans and station wagons.
2. Redesigned and custom made the former Sumter vehicle so that it now serves as the primary remote production vehicle. It has taken the place of the large, 1972 unit which had served that role. This older vehicle has undergone some technical changes which enable it to serve, at the ETV Center, the growing demand for the production of money-saving teleconferences.
3. Formulated plans to redesign the former Beaufort vehicle so that it will serve as a multi-purpose support vehicle for both television and radio remote broadcast productions on a statewide basis.

Our continuing study of this subject will go beyond the number of vehicles to include type of vehicles and how such vehicles would best be equipped to meet various needs. Additionally, we will be looking not only at existing production requirements but will do our best to anticipate future needs, equipment trends and technology changes. No additional actions--only our continuing professional evaluation of the economy of all equipment we can potentially use--are required at this time.

TERMINATE CLOSED CIRCUIT SCHOOLS NOT USING

ETV has terminated many schools from the closed circuit network for lack of use through the years. We will continue to do so on a case by case, carefully considered basis. A school using no ETV should lose its service so that schools wanting ETV service can receive it. That will continue to be our policy.

CONSIDER VIDEO TAPE DUPLICATION AS AN ALTERNATIVE TO CLOSED CIRCUIT

The year before the LAC work on ETV began, we were in the midst of an intensive study of the use of video tape duplication as a means of distribution. This ETV study took many months. Outside, expert consultants were used and a substantial amount of data was collected and reported to the ETV Commission. This recommendation is already thoroughly fulfilled.

EXPEND STATE FUNDS ONLY FOR PURPOSES APPROPRIATED

ETV has always expended funds only for the purposes appropriated. There is misunderstanding in the LAC Report of an instance some years ago of the expenditure of \$198,710 for closed circuit, the only example cited with respect to this recommendation. The LAC Report states: "ETV was appropriated \$198,710 by the

Legislature for an anticipated 8% rate increase for closed circuit lines. However, the Public Service Commission did not approve the increase, but ETV spent the funds even after the Budget and Control Board recommended that the funds lapse to the General Fund."

ETV fully followed Legislative intent. First, the General Assembly did not appropriate any new or additional funds for the proposed closed circuit rate increase. ETV shifted existing funds from other categories in the ETV budget to cover the contingency that a rate increase might materialize. When it was known that the rate increase would not occur, ETV expended the funds for closed circuit services--the category in which the funds were appropriated by the General Assembly. ETV was never in any way informed of a Budget and Control Board recommendation that the funds lapse and proceeded on the assumption it should expend the funds in the manner approved by the General Assembly. It seems strange that ETV should be criticized for being prudent enough to reserve sufficient funds to cover a potential deficit and for spending these funds as appropriated when the deficit did not occur.

In short, ETV did not receive any additional funds for the rate increase. It expended funds in its budget from the category to which they were appropriated by the General Assembly. ETV was never informed of any different feeling by the Budget and Control Board. Legislative intent was precisely followed.

FULLY JUSTIFY BUDGET REQUEST, INCLUDING EQUIPMENT SCHEDULES

ETV sees no justification for this LAC recommendation since detailed equipment schedules, inventory lists, and long-range plans for equipment purchase have been provided thoroughly and consistently in the past and will be supplied in the future. Equipment lists have been regularly supplied to the Budget and Control Board and all appropriate legislative committees. Copies of such lists have been supplied to LAC to clarify this point.

ADHERE TO TRAVEL REGULATIONS

In the audit of several years' travel by ETV two examples were found by LAC when, in 1978, ETV failed to secure Budget and Control Board approval for foreign travel. A mistake was made. The record stands clear that ETV will comply with this regulation in the future as it has in all other cases in the past. All foreign travel, except in this instance of two trips, has received prior Budget and Control Board approval. All travel regulations are and will continue to be followed by ETV.

COMMENTS -- IMPLEMENTED DURING AUDIT

INVENTORY SCHOOL EQUIPMENT

A thorough and comprehensive school equipment inventory system has been put fully in place and has been approved by the State Auditor and Attorney General. It should be noted that ETV had always complied fully with audit requirements in this area until LAC requested an Attorney General's ruling which was contrary to past rulings. ETV immediately implemented an inventory system to comply with the new ruling obtained during the course of the audit.

MOVE STATE PURCHASED SETS TO USING SCHOOLS

ETV will do this in cooperation with ITV and the school districts. The Office of ITV/R response to the LAC Report explains this situation thoroughly. Only 16.85% of sets in the schools are State purchased. LAC statistics do not clearly reflect this fact. ETV cannot move sets purchased and placed by the school districts themselves.

SURVEY VIEWING AUDIENCES NOT NOW COVERED

Surveys such as those recommended have been commissioned and are in hand. Others are underway.

NEGOTIATE A CONTRACT WITH UTILITIES FOR CLOSED CIRCUIT

Such contract negotiations are in progress with Southern Bell. The outcome of such negotiations, in light of recent Public Service Commission granted rate increases to the utility, is uncertain, however. ETV has recommended an annual contract before. Such a contract would have obvious advantages to ETV and to the State and on several occasions in the past we have discussed such a contract with Southern Bell without success. Nonetheless, we are continuing. It is important to understand, in this contract, that because Southern Bell is a public utility answerable only to the Public Service Commission, we have no authority to force the development of such a contract.

DEVELOP WRITTEN PROCEDURES TO TERMINATE LOW UTILIZATION SCHOOLS

Such procedures have been developed and are in place.

DEVELOP POLICIES AND PROCEDURES MANUAL

The development of a comprehensive Policies and Procedures Manual is underway. An outline of its contents has been provided LAC.

CHANGE INVENTORY ON "ITEMS NEVER USED"

This is in the process of being completed, as recommended. Certain historical ETV equipment should be preserved for archival purposes and it will be so identified on inventory records.

RECORDS ON VIDEO TAPES RECEIVED AND SENT TO SCHOOLS

STORE SCHOOL TAPES SECURELY

These recommendations are related. A new system is in place and fully operational. School tapes are securely stored in special locked quarters.

DEVELOP POLICY ON HIRING OF RELATED PERSONS

A new policy is in place which requires agency head approval to hire any person related to any existing ETV employee. LAC recommended this policy which is now fully in force.

ADHERE TO RULES ON PERFORMANCE APPRAISALS

This is being done. Division Heads receive the same performance appraisal as other employees. This was the only fault found by LAC in the area of performance appraisals.

ESTIMATE INDIRECT COST RECOVERIES IN BUDGET

Although this is difficult because of wide year-to-year variances, indirect cost recovery estimates are included in budget requests as recommended.

COMMENTS -- DISAGREE

NO FUNDS FOR INSTRUCTIONAL RADIO

The recommendation to deny instructional radio to the thousands of students and teachers who now use it and the students and teachers who will use it in the future cannot be supported by the facts. For only \$50,640 a year 85,931 course enrollments were achieved last year--a cost of only 58¢ per course enrollment per year.

Instructional radio in South Carolina is just over four years old. Its high efficiency and success in this short tenure do not support the concept of dropping the service to save \$50,640 in any way at all. Utilization of instructional radio services is excellent considering the lack of school reception equipment and the newness of the service. There is additional information on this aspect of the service in the response of the Department of Education and in an effort not to be repetitive we simply recommend careful study of that information and respectfully request an extremely thorough reexamination of this recommendation on the basis of efficiency, quality of materials, impact, and cost effectiveness of delivery for certain learning materials.

The statement on page 43, that South Carolina is the only State in the nation that provides instructional radio to public schools, is totally wrong. Instructional radio activity exists across the country.

* * * * *

* Legislative Audit Council Comment - Based on documentation provided by *
* ETV on April 14, 1981, the Council has deleted this statement. *
* * * * *

The LAC Report alludes to the lack of tape duplication facilities for radio instructional material. At a meeting of ETV and ITV officials on October 23, 1980, the decision was made to create such a system. Detailed discussion resulted in a plan and the purchase of equipment which will make this process fully operational to handle both mass and individual lesson duplication for all instructional material in the immediate future.

CONSIDER DISCONTINUING FUNDS FOR TAPE AND DELAY CENTERS

ETV feels that the conclusions and comments relating to tape and delay centers in the LAC Report are seriously out of perspective with all of our existing statistical information and our previous analysis of the impact of tape and delay centers on ITV utilization. The ITV/R response to the LAC Report also comments on tape and delay centers. The LAC Report compares 118 tape and delay schools with 107 nontape and delay schools (all of the schools being on the closed circuit network, of course). The LAC study of one year's data of only individual student enrollment completely ignored the number of courses used by each student and led to the conclusion that there was only a small increase in ITV enrollment because the tape and delay centers existed. This analysis falls short of the study of other, significant data and inevitably leads to a final misperception. ETV has evaluated the utilization in schools served by tape and delay service in a much more comprehensive fashion: 1) for a number of years, 2) for increased individual student enrollment, 3) for increased course enrollment, and 4) for all pertinent costs to all of the appropriate combinations of the above data. In analyzing the multiple ITV series use, it was noted that the increases attributable to the tape centers did increase the numbers using and did decrease the cost per increased student for the three-year period of one study and the six-year period of another. Utilization associated with the schools served by a tape center showed increases that are far greater than those within the nontape center schools. The costs associated with the schools served by the tape centers showed decreases that were greater than those schools served by nontape methods. It is incorrect to state that the tape centers are not cost effective. The existence of these tape and delay centers is one of the great strengths of our system allowing us to provide much more service than any other state.

STATE PERSONNEL REVIEW HIRING AND REPORT TO THE BUDGET AND CONTROL BOARD

ETV sees absolutely no reason it should be singled out to be treated differently from all other State agencies. The three changes in personnel procedures recommended in the LAC Report have been fully implemented or are being implemented. There is no justification for the recommendation that ETV undergo a continuing, add-on, bureaucratic scrutiny not required of others.

BASE SCHOOL EQUIPMENT DECISION ON TIME AND NUMBER OF PROGRAMS USED

It is not possible to do this unless and until the Office of ITV/R of the Department of Education adopts an elaborate and expensive new system for securing additional utilization information.

INVENTORY STAGE PROPS AND DURABLE ITEMS

With respect to this recommendation ETV is placed in a dilemma of following the procedures and recommendations of the State Auditor or the LAC. Their directives are mutually exclusive.

The LAC Report concludes that ETV has interpreted the Comptroller General's disbursement code, which is a supply category, as the authority not to include durable items such as equipment that are purchased as prop furnishings on the inventory. Rather, it is the State Auditors who, over the years, have indicated that stage props should not be classified as equipment. The State Auditors based their decision on the fact that the majority of items purchased normally lose their identity in a short period of time because of their multiple uses in various scenic designs.

ETV will continue to comply with the policies and procedures of the State Auditors. It will be fully responsible for durable items that are purchased as prop furnishings, insuring that they are carefully guarded and properly used.

ADDITIONAL ASPECTS OF THE LAC REPORT --

THE OFFICE OF ITV/R STATE DEPARTMENT OF EDUCATION

In an accompanying response to the LAC Report, the Office of Instructional Television and Radio has outlined its concerns with those aspects of the LAC Report dealing with ITV utilization. The responsibility for gathering utilization information is ITV/R's. However, ETV would like to point out strongly that South Carolina has by far the most comprehensive and thorough utilization data base of any instructional broadcasting system. Using a "census" approach of questioning every teacher in the State every year provides more accurate information than quick surveys or sampling techniques. It is inappropriate for the LAC Report to criticize this data in some of the ways it has. The information collected is highly accurate and is not misleading and is not inadequate. The mutual accusation to ETV and ITV that this data is misleading is completely unfounded. We have reported to all authorities fully and carefully. Our prudent use of excellent terminology is criticized inappropriately. Both agencies are responsive to the General Assembly and the education community. We define utilization in South Carolina so that it can be fully understood by both--to make it clear and responsible.

Two concepts in the LAC Report are false: 1) that ITV has not established a method to measure the impact of instructional television or radio on education in South Carolina and 2) that ETV and ITV are presently unable to determine if a correlation exists between the use of ITV and radio resources and the educational performance of students. In each of these cases, and in parallel other statements in the LAC Report which echo essentially the same charges, the LAC has ignored the extensive testing done by ITV on the effectiveness of both television and radio lessons in the field, on a continuing basis. ITV's formative and summative evaluation processes have been clearly outlined. The record should be set straight on the matter of testing materials and on the fact that television and radio do have a positive impact on education in South Carolina.

 *
 * Legislative Audit Council Comment - Based on ITV's comments, the Council
 * has deleted the sentence referring to correlation and added the following
 * sentences to clarify its position:
 *
 * ETV and ITV cannot tell if students in South Carolina have
 * benefited anymore from instructional television than from
 * other instructional methods. No criteria exists to determine
 * how much ITV should be used or whether ITV improves student
 * performance anymore than the use of filmstrips, instruction
 * by the classroom teacher, or other less expensive alternatives.
 *

HIRING PRIVATE ATTORNEYS

Although the recommendations in the LAC Report are addressed to the General Assembly and the Attorney General, ETV feels that the LAC Report improperly gives the impression that ETV pays for the services of private attorneys without knowing the terms of service and that we merely process invoices from attorneys without question. ETV knows clearly what is required of any attorney employed for each purpose. We review very carefully every invoice from an attorney to determine that the services billed have been provided. ETV follows all current State rules and procedures very carefully. The Attorney General has approved all attorneys to be employed. He approves the term of employment, the hourly rate of compensation, and the ceiling on the total amount of funds that can be expended.

We have no objection to the recommendations to the General Assembly and the Attorney General with respect to new policies and procedures for the employment of private attorneys. It should be clear, however, that there is no basis in ETV operations to cause such recommendations to be made.

INACCURACIES

The following are specific inaccuracies in the LAC Report:

1. The table and text comparing South Carolina to other states shows that South Carolina has 8 ETV stations, rather than the 10 we actually have.
2. The same text as the above shows ETV coverage as 57% of the State rather than 72%.

 *
 * Legislative Audit Council Comment - The information in the report
 * reflects the status of South Carolina and ten southeastern states
 * surveyed by the Council in June of 1980.

3. The LAC Report on page 11 states that \$115,000 could have been saved from FY 1974-1975 to FY 1979-1980 if a school had been terminated. The accurate savings would have been \$73,311.

* * * * *

* Legislative Audit Council Comment - Based on ETV's initial comments, *
* the Council adjusted its estimated savings from \$115,000 to \$73,310. *
* Due to an editing oversight this change was not made in the report *
* summary and is now corrected. *
* * * * *

4. On pages 11 and 77 the LAC Report repeats the same error--that savings achieved by tape duplication to 16 schools would be \$150,618 annually. The correct amount is \$40,618.
5. The methodology used by LAC staff to calculate what they call "surplus" sets is invalid and necessarily leads to false conclusions. The LAC Report also continues to omit the fact that in 1979-1980 there were more using teachers than television sets by a ratio of 1 to .99.
6. The LAC Report states that North Carolina and Georgia do not use tape and delay centers; this is accurate. However, it is not possible, by definition, for them to do so since they deal only in single-channel, open circuit broadcasting. Since they have no multi-channel, closed circuit capability they could not use and would not have tape and delay centers.
7. The LAC Report states, "Furthermore, \$3,807,799 in bond funds have been authorized for three additional regional studios..." This is not correct and is seriously misleading. The \$3,807,799 was authorized for television transmitters and towers, not studios. These transmitters and towers are necessary whether or not regional studios exist at those locations.

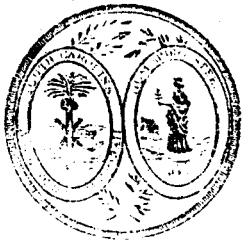
* * * * *

* Legislative Audit Council Comment - Considering ETV's comments the *
* Council has made appropriate adjustments in the report. *
* * * * *

CONCLUSION

ETV has attempted to respond, at least in summary form, to the recommendations addressed to it. We intend to use them constructively. We have in no way attempted to respond to all conclusions, statements, and text. This response document is restricted by LAC rules both in length and in the time available to prepare it. Therefore, lack of comment on any specific statement in the LAC Report does not imply concurrence or disagreement. Further study will be given the LAC Report when it is published to determine ways it can be used to continue to improve the ETV system.

APPENDIX F



Charlie G. Williams
State Superintendent of Education

STATE OF SOUTH CAROLINA
DEPARTMENT OF EDUCATION

COLUMBIA 29201

April 10, 1981

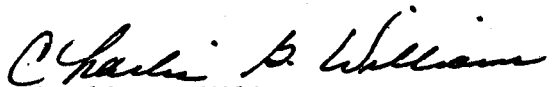
Mr. George L. Schroeder
Director
Legislative Audit Council
620 Bankers Trust Tower
Columbia, South Carolina 29201

Dear Mr. Schroeder:

Please find attached a copy of our response to the Legislative Audit Council's Report on the audit of the South Carolina Educational Television System. The audit of South Carolina ETV required a response by the State Department of Education because of the legal relationship between our Office of ITV and Radio and South Carolina ETV.

The State Department of Education has not attempted to respond to all conclusions and recommendations included in the Legislative Audit Council's Report. The fact that there is not a response to all items does not imply concurrence or disagreement. All conclusions and recommendations in this report which relate to our responsibilities will receive detailed study and deliberation and will be utilized, as appropriate, to strengthen South Carolina's ITV/Radio program.

Respectfully,


Charlie G. Williams
State Superintendent of Education

CGW:lb

Attachment.

1

SOUTH CAROLINA DEPARTMENT OF EDUCATION
RESPONSE TO THE LEGISLATIVE AUDIT COUNCIL
REPORT ON EDUCATIONAL TELEVISION COMMISSION

The Department of Education commends the staff of the Legislative Audit Council for their efforts in auditing the programs of instructional television and radio as incorporated in the review of the South Carolina ETV Network.

Recognizing the unique relationship between the State Department of Education and SC ETV Network in the management of various elements of the program of ITV and Radio, a response is required to several conclusions and recommendations in the report.

There are four underlying themes cited in the LAC conclusions and recommendations:

- (1) Management and utilization of public school reception equipment
- (2) Information available on utilization of ITV/Radio resources
- (3) Instructional Radio
- (4) Distribution Systems (District Taping Centers and Closed Circuit)

Responses to LAC specific findings are grouped under each concluding recommendation.

Theme (1) Management and utilization of public school reception equipment.

LAC Recommendation

Any equipment identified as property of South Carolina ETV, that is in schools not being used, should be removed and placed in schools needing the equipment.

The above recommendation is agreed to in principle. SDE will review and update its policies and procedures concerning placement, use and transfer of state purchased TV equipment. However, neither the SDE nor the ETV Commission has any regulatory authority over the disposition and use of all reception equipment (i.e. TV sets, radios, VTRs, etc.) in the public schools of South Carolina. In 1978-79 only 16.85% of the 11,502 TV sets in the public schools had been purchased with state funds on a matching basis (ETV). Therefore, only these sets were subject to ETV or SDE control. The remaining 83.15% were the sole property of the schools, having been purchased with local school funds. Statistical information compiled by the LAC concerning the ratio of TV sets to teachers using TV and surplus TV sets takes on a different set of meanings when the above fact is recognized.

The State Department of Education responds below with specific factors influencing the ratio of TV sets to teachers using TV and to the issue of surplus sets.

- (1) Teachers Moving - Many teachers are not stationary but move from classroom to classroom during the course of a day as they teach students. This is especially true in high schools. If administrators are to plan for the use of television, they must either place tv's in several rooms or a tv must be moved from room to room to accommodate the movement of faculty members. Administrators have found it impractical in many cases to move tv's. A ratio of one to one in this situation is not feasible.

2. Reception - There are many areas of South Carolina that still have no reception or marginal reception of an ETV signal. There are many schools in marginal areas which acquired a few tv sets for the purpose of trying television only to find out the quality of the reception over the course of a year did not justify continued use. These sets remain on inventory however. 598 sets are in schools not using ITV and are in areas with marginal reception and should be reassigned. This suggestion has been made to local district personnel.
3. VTR's Require a TV Set - In 1978-79, 697 VTR's, each having tv sets as monitors connected to them that were not available for general classroom use. VTR's require a monitor when recording is done. The monitor will not operate independent of the VTR.
4. Maintenance of TV Set - TV sets break from time to time. In 1978-79 the number of sets reported inoperable were 883 (mainly old black and white sets).
5. Black & White vs. Color and Age of TV Sets - In 1978-79, 76% were B/W sets; 95% of our resources were in color, 70% of the VTRs were color; ETV broadcasts in color. Teachers report color reception is more motivating and interesting to students. For this reason, teachers prefer using color tv's. 51% of tv's, or 6,171, are 10 years or older; 81% or 9,848, are 6 years or older and are predominantly B/W tv's. The schools of the State are acquiring more color TV sets. Since the B/W tv's are more prone to need repair, some principals carry some as extra to insure set availability.

Sets bought since 1975-76 with state funds have primarily been color TV's. These are used first, then B/W TV's, since color is preferred. ITV has documented their emphasis on shifting unused B/W TV's through this period. There are no unused color sets to be shifted.

Schools that desire more TV's want new color sets. In 1979-80, only 24% of all the TV's in S.C.'s public schools were color while most states have a far greater proportion of color sets. It follows that there remains the need for the purchase of TV and Radio equipment for use by schools.

RELATIVE AGE OF TV SETS IN SC PUBLIC SCHOOLS

<u>Age of TVs</u>	<u>Period of Purchase</u>	<u>No. of TVs</u>	<u>Percent of All TVs</u>
1 - 4 years old	1976-79	1,811	14.95%
5 - 9 years old	1971-75	4,215	34.56%
10 years or older	1970 or before	6,171	50.59%

6. Staff Development - The State Department of Education schedules the SC ETV Network from 3:00-4:30 Monday through Friday with programs for the training of teachers. Many districts have developed comprehensive plans for incorporating ITV and Radio programming into their teacher training efforts. Sets used in this fashion would affect the ratio of TV sets to teachers using ITV.
7. School Curriculum Changes and Changing Teacher Assignments - Every school district each year has some changes in their curriculum and in teacher assignments due to resignations, retirements, etc. These factors influence which teacher may use television in a new assignment and can influence the ratio of teachers using television to the number of tv sets housed in the school. If a school needs less tv sets one year than another because of these situations, and, if they own the sets, it is reasonable to assume they will retain the sets on inventory.
8. Promotional or Experimental Use of TV's - Many schools over the years when they began using television bought tv sets to encourage the use of ITV. This practice produces more TV sets on inventory than teachers using them for a year or so.

SUMMARY

On the basis of the way school systems operate in terms of curriculum, teacher assignments, large group instruction, maintenance, promotion of TV and use of VTR's, it would be virtually impossible to maintain a perfect balance between the number of tv sets and the number of using teachers. In fact, it is reasonable to expect an imbalance more tv sets than using teachers. The 1980-81 statewide figures of 12,197 sets to 12,316 teachers speak well for tv set usage in S. C. When given a choice, teachers will use color sets and leave black and white ones unused. In the state, as a whole, 76% of all tv sets owned by school districts today are black and white. Only 5% of all ITV programming is B & W. When most homes are using color sets and students see color programs, they expect the same at school. For the past few years the state funding for the acquisition of tv sets and other equipment on a matching basis has decreased to zero for 1980-81.

LAC Recommendation

State matching funds should be provided to schools based on a needs assessment of the entire state rather than limiting the needs analysis to each designated utilization district.

Over the years the total amount of tv equipment needed to meet the schools' requests far exceeded the money available to purchase it. Therefore, allocations were made to enable each ITV/R consultant to meet the top requests in his area of the state. It is necessary to meet the needs of as many schools and districts as possible which this approach permitted. Priority needs and projects have been funded. Examples are twenty

selected districts having lower academic achievement and being financially poor, and the Rock Hill ITFS project. This permitted flexibility needed to meet the need for more equipment.

When funds are appropriated again for this purpose, the LAC recommendation will be given serious consideration.

Theme (2) Information available on utilization of ITV/Radio Resources

LAC Recommendation 1

ETV, in cooperation with the Office of ITV, should contract with an independent party to conduct an in-depth study of ITV/R use and effect on education in S.C. The study should include recommendations for establishing a methodology for the measurement and evaluation of Instructional Television's effect on education in S. C. that can be used by ETV and ITV on a continuing basis.

This recommendation has merit and funds should be appropriated to contract for this study.

LAC Finding:

No correlation between ITV/R test scores, etc. No criteria for how much to use.

ITV has determined a correlation between the use of programs and educational performance. Ten percent or more of the programs in all series produced by ITV/R are field tested with students. The results of these field tests indicated significant increases in achievement after the use of the programs. Field testing is done before programs are broadcast. If field testing doesn't show a gain in learning, programs are redone. Producing agencies for the series that are acquired conduct similar field testing of programs with students before they are broadcast or offered to others. Acquired programs are reviewed by curriculum committees and used with students to assess if they produce learning and meet educational needs in S.C. (See Appendix I for an example of a field testing plan and the results).

 * Legislative Audit Council Comment -- Based on ITV's comments, the Council
 * has deleted the sentence referring to correlation and added the following
 * sentences to clarify its position:
 *
 * ETV and ITV cannot tell if students in South Carolina have
 * benefited anymore from instructional television than from
 * other instructional methods. No criteria exists to determine
 * how much ITV should be used or whether ITV improves student
 * performance anymore than the use of filmstrips, instruction
 * by the classroom teacher, or other less expensive alternatives.
 * The study provided by ITV's Appendix I was performed in 1974
 * by a student working on his dissertation.
 *
 * *****

LAC Finding:

During FY 1979-80, the state spent an estimated \$4 million to lease closed circuit channels, compile utilization statistics, develop resources and promote utilization of ITV and Radio. ETV's total expenditure for FY 1978-79 was \$13,402,561. This is a growing annual expense for which ETV cannot accurately determine the educational benefits gained by South Carolina children.

The LAC implies above and states elsewhere in their report that S.C. ETV spent \$13,402,561 in 1978-79 to deliver ITV/R programs and services to the public schools of S.C. In addition to the in-school services, ETV provides services to Higher Ed., Technical Education, state agencies, police officers, medical entities, business and industry and public broadcasting. The costs of these services are a part of the \$13,402,561.

LAC Recommendation 3

The Office of ITV/R should revise the utilization survey to determine the amount of time ITV is used in a series.

The Office of ITV/R can collect information on the number of lessons teachers used in an ITV/R series and convert that into minutes and hours. In fact, that was done on two separate occasions. However, in their report the LAC proposed that a formula should exist for determining the appropriate amount of time that ITV/Radio resources are desirable and acceptable in meeting the educational needs of students in each of the classrooms in this state.

It is the position of the State Department of Education that the selection of programs to use with students should properly be determined by teachers who are trained and licensed to match learning resources to student needs. As a service function of the State Department of Education, the Office of ITV and Radio consultants conduct in-service activities with teachers for the purpose of maximizing the quality and quantity of instructional television usage of resources in the instruction of children.

In '72 and '76, we determined that 45%-50% of the lessons in a series were used on the average. We do not determine the average number of lessons used each year since the measure developed in the two previous years gives us a working figure to apply to future years. These measures were developed at great effort and expense--one was a representative sample, the other a universal survey.

School districts and individual schools feel our records concerning the amount of time TV is used is adequate to the extent that school districts in 1978-79 locally purchased 83.15% of the TV sets presently in the schools. They feel the amount of time TV is used justified this expenditure.

LAC Findings

ETV reports information on students usage of ITV in terms of "course enrollment" but there are no students actually enrolled in ITV and there are no ITV courses. The word "enrollment" is misleading because students using ITV programs are not required to take exams or attend television classes regularly. The word "course" is misleading because it implies that program series are the primary sources of instruction when ITV and Radio are used in the same manner as a filmstrip or audio-visual aid. ITV is a supplement.....used like a filmstrip....ITV officials stated that the amount of ITV/R is not important...

The issue regarding the term, "course enrollment" should be reviewed. It is not intended to be misleading.

Instructional Television and Radio has been designed to be both basic instruction and enrichment. An individual ITV/R program could be compared to a 16mm film, but its use is not appropriately compared to the use of a filmstrip.

Theme (3) Instructional Radio

LAC Recommendation 2

The expenditure for state funds for Instructional Radio programming and broadcasting in the public schools should be discontinued.

When Instructional Radio began in the Spring of 1976, only 2 FM stations (Greenville and Charleston) were in operation broadcasting Instructional Radio lessons. By 1977, two more South Carolina Educational Radio Network stations (Sumter and Columbia) went on the air broadcasting Instructional Radio lessons. In 1978, Rock Hill was added to the Network, and finally, in September, 1980, Beaufort, WJWJ-FM was the sixth and last FM station to be added to the Instructional Radio Network. This indicated that the Radio Network has been increasing its coverage gradually since 1976 when IR began and now covers 85% of the state. Only now can many schools really gear up to use Radio. It would be a mistake to abolish a promising new effort in instructional media without giving it a fair chance to succeed.

From a practical point of view, the state would save no money by discontinuing the use of the network for in-school instruction. Other programming aimed at the population as a whole would simply replace that now devoted to school children at no saving to the state. The cost of instructional program development and acquisition for 1978-79 was \$2,760.50.

Theme (4) - Distribution Systems (District Taping Centers and Closed Circuit)

LAC Recommendation 6

The General Assembly should consider discontinuing the funding of tape and delay centers and the leasing of local Closed Circuit Channels for tape and delay centers.

ITV/R feels that the conclusions and comments relating to tape and delay centers in the LAC report are seriously out of perspective with all existing statistical information and previous analysis of the impact of tape and delay centers on ITV/R Utilization.

The LAC analysis of one year only of ITV utilization for District Distribution Centers fails to note the significant increases of the first year of operation and the stronger utilization in comparison to other existing delivery means.

The table below on ITV Growth in First Year of Operation for District Distribution Centers indicates significant usage growth according to the measures of individual ITV students, series enrollment, ITV teachers and using classes.

INSTRUCTIONAL TELEVISION UTILIZATION GROWTH IN FIRST YEAR OF OPERATION
FOR
DISTRICT DISTRIBUTION CENTERS

DISTRICT DISTRIBUTION CENTER	YEAR	NO. DDC SCHOOLS	NO. USING SCHOOLS	NO. TVS	NO. VTRS	NO. INDIV. ITV STUDENTS	TOTAL SERIES ENROLLMENT	NO. INDIV. ITV TEACHERS	NO. USING CLASSES
Blackville	1975-76	0	10	64	7	2,498	9,274	74	359
	1976-77	10	10	72	8	3,823	16,735	131	787
Irmo-Chapin	1975-76	0	3	69	6	2,943	9,309	76	334
	1976-77	4	4	82	15	3,889	17,956	103	687
Spartanburg #7	1973-74	0	2	28	2	96	114	4	6
	1974-75	4	4	128	16	3,893	16,720	122	647
Sumter	1975-76	0	3	33	8	4,121	14,785	110	559
	1976-77	3	3	55	10	4,150	30,568	123	1,312

For each of the above District Distribution Centers, the first year shown is the year prior to each Center becoming operational, while the second year is the first year of operation.

Eight district distribution centers in operation from 1973 through the 1978-79 school years experienced an increase of 197% in individual ITV students and an increase of 269% in ITV-using teachers during their first year of operation. Improved scheduling directly influenced a 414% increase in ITV series enrollment. During the first year of operation for these centers, 52% (30,642) of the students and 27% (866) of the teachers used ITV resources and the ITV series enrollment was 126,236.

Each succeeding year of operation of the district distribution centers has shown an increase over the previous year. During the 1978-79 school year which was the last year that all 8 taping centers had been in operation an equal number of years, there were 71% (41,202) of the students and 39% (1,268) of the teachers utilizing ITV resources. The total ITV series enrollment was 232,559 students.

Our 1979-80 data shows that use of ITV grew faster for District Distribution Center Schools than for other closed circuit schools which are not served by a District Distribution Center. For example, the number of using teachers in the school served by the 12 District Distribution Centers grew 30% as compared to 1.33% for the other closed circuit schools not served by a District Center. (See Table Below)

Comparison of All Schools, Open, Closed Circuit and
District Distribution Centers School Utilization

	ITV Enrollment		Percent Change	ITV Using Teachers		Percent Change
	1979-80	1978-79		1979-80	1978-79	
All Schools	1,885,203	1,618,906	+16.45%	12,316	10,823	+13.79%
Open Circuit	1,777,655	1,034,397	+13.85%	8,155	7,445	+ 9.54%
Closed Circuit	259,956	246,576	+ 5.42%	1,526	1,506	+ 1.33%
Dist. Centers	412,857	337,933	+22.17%	2,434	1,872	+39.02%

A review of the current (1979-80) Utilization report on District Distribution Centers (Tape & Delay) does not give support to the recommendations of the LAC. It does indicate their importance to school utilization. Of the 253 closed circuit schools, 124 are served by DDS. This number represents 49% of the total closed circuit schools. These 124 schools representing only 49% of closed circuit schools, produced the following percentages of total closed circuit utilization.

57% of individual students

61% series usage

62% of using teachers

61% of classes

SUMMARY

The State Department of Education has not attempted to respond to all conclusions and recommendations included in the Legislative Audit Council's Report. The fact that there is not a response to all items does not imply concurrence or disagreement. All conclusions and recommendations in this report will receive detailed study and deliberation and will be utilized, as appropriate, to strengthen South Carolina's ITV/Radio program.

A STUDY TO DETERMINE THE EFFECTIVENESS OF LESSONS FROM "SANDLAPPER'S CORNER" THROUGH A SERIES OF PRE AND POST TESTS

Since the series "Sandlapper's Corner" was developed to present certain concepts and information about South Carolina to third grade students, the effectiveness of the series could be tested. A series of pre and post tests were given on selected lessons from the series.

It is assumed that as a result of viewing an instructional television lesson, the viewer will learn certain information that was presented in the lesson. Using this assumption the hypothesis for the study is stated as: after viewing a lesson from the instructional television series "Sandlapper's Corner", third grade students will show a significant improvement at the .05 level of concepts taught in that lesson as shown by pre and post test scores.

Five of the the 32 lessons in the series were tested as a part of this study. Each class tested was given a pre-test immediately preceding the television lesson. The same questions were given as a post test immediately following the telecast.

In order for the tests to reflect learning resulting from the television lesson rather than the children's ability level especially in reading, the tests were given orally. Answers were marked on a special answer sheet that required little reading.

The classroom teacher was asked not to prepare the students for the television lesson as is usually done. There were no pre telecast activities or discussion of the lesson done prior to the pre-test. All post telecast activities took place after the post test had been given and the answer sheets collected. As a result of these precautions it seems justified to assume that any change in learning was due to the television lesson itself.

Data was collected on Lesson 6 - Crops, Lesson 10 - Indians, Lesson 14 - South Carolina and the American Revolution, Part II, Lesson 16 - Life in South Carolina During the 1800's and Lesson 18 - South Carolina Today.

Pre and post tests were given in eighteen classes and related scores were obtained for 460 students.

Using a t-test for related measures, the significance of the difference between two correlated means was obtained. The formula used was:

$$t = \frac{\bar{Y} - \bar{X}}{\sqrt{\frac{ZD^2 - (\sum D)^2}{N(N-1)}}}$$

since two test scores for the same individual are correlated scores. A t-test score was computed for each class as well as a composite score for each lesson.

THE RESULTS OF THIS TESTING PROVED TO BE EXTREMELY SIGNIFICANT FOR FOUR OF THE FIVE LESSONS TESTED (LESSONS 6, 10, 14, 16, AND 18). In all four cases the test results proved to be not only significant at the .05 level but also exceeded the .01 level of significance. Lesson 14 did not prove to have a significant level of improvement in the pre and post test scores. This was predictable since the purpose of this lesson was to provide a foundation or background for later study rather than to teach specific facts about the American Revolution at the third grade level. In the lesson guide, lesson 14 was described as a difficult lesson which may be too hard for third graders. It was left to the discretion of the teachers whether their classes should view this lesson.

TABLE I
RESULTS OF FIELD TESTING

	N	ΣX	ΣY	ΣD	ΣD^2	t
Class 1	28	178	205	27	95	3.193*
Class 2	29	161	231	70	230	8.804*
Class 3	26	91	154	63	229	7.070*
Lesson 6	83	430	590	160	554	10.149*
Class 4	19	203	207	4	24	0.809
Class 5	16	168	201	33	115	4.664*
Class 6	23	271	278	7	53	0.960
Lesson 10	58	642	686	44	192	3.463*
Class 7**	117	714	714	0	152	0.000
Class 8	18	94	95	1	35	0.164
Class 9	29	133	152	19	61	2.679*
Lesson 14	164	941	961	20	248	1.272
Class 10	20	91	105	14	60	1.926
Class 11	26	136	159	23	73	3.108*
Class 12	24	123	140	17	43	2.991*
Lesson 16	70	350	404	54	176	4.626*
Class 13	29	228	269	41	237	3.011*
Class 14	29	206	217	11	101	1.098
Class 15	27	284	285	1	9	0.328
Lesson 18	85	718	771	53	347	2.974*

* Statistically significant, $P < .05$

** Class 7 consisted of 4 separate classes